SMOKERS AND SMOKING: AN IN-DEPTH INTERVIEW STUDY OF INITIATION, TRANSITION, MAINTENANCE, AND CESSATION

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SMOKERS AND SMOKING: AN IN-DEPTH INTERVIEW STUDY OF INITIATION, TRANSITION, MAINTENANCE, AND CESSATION

Abstract
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The results are organized around the four stages in a smoker's career. Numerous quotes from the interviews and five illustrative cases are presented to exemplify the patterns that emerged.

A number of hypotheses specific to each stage of smoking were generated as was a process model for the development of smoking patterns. The model proposes that physical tolerance for cigarettes determines smoking rate and smoking rate, initiation environment, and dominant affective states determine eventual smoking patterns.

Among the findings were the following: Transition to regular smoking was delayed by the restrictions on teenage smoking. Removal of restriction resulted in an increase in consumption rate, perception of personal as well as social motives for smoking, and the development of a smoker identity. The main factors in smoking maintenance were physical dependence and beliefs about the consequences of smoking cessation.

Twenty-five percent of the smokers had maintained abstinence from one to five years before relapse. Relapse was most common for the long-term regular smokers. Permanent abstinence was associated with cessation at a young age and cessation before marriage to a nonsmoker.

It was suggested that in order to more accurately estimate the number of long-term dependent smokers who cease smoking and maintain abstinence, length of smoking history, smoking rate prior to cessation, and years of abstinence must be obtained and correlated. In-depth interviews may be necessary to establish the smoking history and current smoking status of a substantial number of individuals.

Keywords
Biology, Animal Physiology, Agriculture, Fisheries and Aquaculture
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SMOKERS AND SMOKING: AN IN-DEPTH INTERVIEW STUDY OF INITIATION, TRANSITION, MAINTENANCE, AND CESSION

University of New Hampshire

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SMOKERS AND SMOKING: AN IN-DEPTH INTERVIEW STUDY OF INITIATION, TRANSITION, MAINTENANCE, AND CESSION

BY

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B.A., San Diego State University, 1971
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DISSERTATION

Submitted to the University of New Hampshire in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy
in
Psychology

September, 1983
This dissertation has been examined and approved.

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May 31, 1983
DEDICATION

To my mother and brother, two very special people,
who have broadened my horizons
and always have been there to provide
encouragement and most important--love.
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ABSTRACT

SMOKERS AND SMOKING: AN IN-DEPTH INTERVIEW STUDY OF INITIATION, TRANSITION, MAINTENANCE AND CESSATION

by

JEANNE C. RIDDELL

University of New Hampshire, September 1983

The purpose of the study was to explore, through in-depth unstructured interviews, the factors preventing experimentation with cigarettes and the factors related to cigarette smoking. Hypotheses generation, as opposed to hypothesis testing, was the goal. Forty-seven men and women between the ages of 18 and 48 with diverse smoking (or nonsmoking) histories and current smoking patterns were interviewed.

The results are organized around the four stages in a smoker's career--initiation, transition, maintenance, and cessation. Numerous quotes from the interviews and five illustrative cases are presented to exemplify the patterns that emerged.

A number of hypotheses specific to each stage of smoking were generated as was a process model for the development of smoking patterns. The model proposes that physical tolerance for cigarettes determines smoking rate and smoking rate, initiation environment, and dominant affective states determine eventual smoking patterns.
Among the findings were the following:

Peer influence but not peer pressure was the main factor associated with initiation. Parental modeling appeared to be a greater influence on individuals who initiated smoking alone.

Transition to regular smoking was delayed by the restrictions on teenage smoking. Removal of restrictions resulted in an increase in consumption rate, perception of personal as well as social motives for smoking, and the development of a smoker identity.

The main factors in smoking maintenance were physical dependence and beliefs about the consequences of smoking cessation.

Twenty-five percent of the smokers had maintained abstinence from one to five years before relapse. Relapse was most common for the long-term regular smokers. Permanent abstinence was associated with cessation at a young age and cessation before marriage to a nonsmoker.

It was suggested that, in order to more accurately estimate the number of long-term dependent smokers who cease smoking and maintain abstinence, length of smoking history, smoking rate prior to cessation, and years of abstinence must be obtained and correlated. In-depth interviews may be necessary to establish the smoking history and current smoking status of a substantial number of individuals.
CHAPTER I

INTRODUCTION

The Surgeon General's report of 1964 (U.S. Public Health Service) which focused public attention on the many negative health consequences of smoking also precipitated considerable behavioral science research on smokers and smoking. Although the pace of this research rapidly accelerated and continues unabated today, its impact on smoking habits has not been as great as nearly twenty years of research might lead us to hope for. There are still 53 million smokers over age 17 in the United States today (approximately 33% of the adult population), while teenagers (and preteens) continue to experiment with smoking in distressing numbers (National Center for Health Statistics, 1981; Office of Smoking & Health, 1979). There is, then, a clear need for still more research in this area.

The importance of such research can hardly be overstated. Each new Surgeon General's report adds new data to those already accumulated enumerating the health hazards that confront those who smoke. It is estimated that 25% of annual deaths may be attributed to tobacco use (Ravenholt, 1978). The death rate for smokers is 10 times higher for lung cancer, six times higher for cancer of the larynx, five times higher for bronchitis, emphysema and asthma, and two
to three times higher for heart disease (Population Information Program, 1979). In the United States smoking is the largest preventable cause of premature death, illness and disability (Richmond, 1978).

The social and economic consequences also have been described. Tobacco induced health problems are estimated to cost the United States 81 million work days a year (Population Information Program, 1979). Smoking has been estimated to account for eight billion dollars annually in health care expenses and an additional 18 billion in lost productivity, wages, and absenteeism (Office of Smoking & Health, 1979). If one includes the property loss due to cigarette-related fires, the aggregate cost of smoking is 41.5 billion dollars annually (Luce & Schweitzer, 1977).

With these medical, social, and economic consequences of smoking in view, most smoking research has had the ultimate goal, either explicitly or implicitly, of reducing the number of smokers by clarifying the nature of smokers and smoking in such a way as to suggest possible means of intervention. Most investigations to date, however, have taken a unidimensional, causal approach and have utilized fixed response measures. Such approaches, while allowing for precise statistical analyses, are limited in several ways. Unidimensional studies can never explicate the complexities that inhere in natural phenomena. Thus, while the influence of a single factor on smoking may be explored in depth, the usefulness of the findings are of necessity limited since rarely, if ever, is any behavior subject to a solitary
factor in isolation from all others. Rather, many variables act in interrelationship with one another, and it may well be in the interaction itself, rather than in individual factors, that one may find the most accurate accounting of what determines whether and to what extent one becomes and continues as a smoker.

The use of fixed responses presents a problem as well. Such data are readily obtained, compiled, and analyzed, but this convenience may be their chief advantage. In studies employing fixed responses, the natural and spontaneous character of phenomena may be sacrificed to convenience. In using such a method, the researcher, who has selected the response categories, is imposing those categories on his/her subjects, structuring reality in advance, as it were, for the sake of fitting the data into neatly analyzable packets. A more purely inductive approach obtains open-ended responses, the analysis of which, though time-consuming (and still, admittedly, somewhat subject to the biases of the investigator), permits response categories to arise from the data.

The comments above are not meant as an indictment of fixed-response methods, but rather are intended to point out that they do have limitations which other methods can circumvent to at least some extent. Any phenomenon as complex as smoking can be most fully understood only through the application of various complementary investigative approaches. The research reported here is an attempt
to deal with the limitations of unidimensional and fixed-response approaches. Through unstructured, depth interviews, relevant variables and response patterns can be identified. This approach has considerable heuristic value; it leads to the generation of hypotheses which provide a solid groundwork for further exploration by experimental methods. The present study is not, of course, without its own limitations; those are considered in Chapter II, where the method itself is described in detail.

In terms of theoretical orientation, the study presented here is inductive; that is, whatever results are found provide substance for the generation of theory. Most previous studies have taken a deductive approach, beginning with a specific theoretical orientation and applying it to smokers and smoking behavior in an effort to determine how well the facts fit the theory. While the deductive approach can be fruitful, it does run the risk that data may be misinterpreted in light of the theoretical bias or that some aspects of the phenomenon may even be overlooked entirely since they fall outside the purview of the particular theory.

Three theoretical orientations which have been most often applied by smoking researchers are intrapsychic models, social learning theory, and the medical model. Studies conducted within the framework of intrapsychic models have explored the psychological characteristics of the smoker (cf: Eysenck, 1965, 1973, 1982; Smith, 1970;
While several personality factors have emerged repeatedly with respect to smokers compared to non-smokers (e.g., more extroversion, antisocial tendencies and impulsiveness) the relationships often have been tenuous and occasionally contradictory (Smith, 1970). On the whole, this approach has not been profitable because of the correlational nature of the research, the small degree of variance accounted for, and the failure to explore the potential influence of environmental and physiological factors.

The application of the medical model to the study of smoking behavior has led to two separate lines of research. One approach has sought to determine the mental health of smokers as compared to nonsmokers (Cattell & Krug, 1967; Kline & Storey, 1978; Matarazzo & Saslow, 1960; Smith, 1970). While some trends have emerged (e.g., higher neuroticism scores for smokers) the studies suffer the same failings as the studies conducted within the framework of the intrapsychic models. Nonetheless, the American Psychiatric Association has included "compulsive smoking syndrome" in the 1980 edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1980).

The second application of the medical model has been the study of the physiologically addictive characteristics of tobacco. The addictive qualities of nicotine have been the most thoroughly examined and although the results are inconclusive (Schachter, 1979), this appears to be a promising line of research (Office of Smoking & Health, 1979).
Social learning theory has focused attention on the environmental influences on smoking.\(^1\) While this approach provides a model for the development and maintenance of smoking patterns (cf: Pomerleau, 1979), researchers in this area primarily have assumed the operation of reinforcement and observational learning and research has been limited to the development of a technology for smoking cessation (Office of Smoking & Health, 1979; Pomerleau, 1979).

The intrapsychic, medical, and social learning models each have contributed to our understanding of the factors involved in smoking. However, because they focus rather narrowly, they limit both the examination of the process aspects of smoking and the interrelationships between intrapsychic, environmental and physiological factors.

The inductive method employed in the present study removes the theoretical constraints and allows the relevant factors and relationships to emerge from the data. The factors the interview respondents believe are relevant to their smoking histories can then be examined in light of current theory to determine which existing theories are applicable and where new formulations are necessary.

At this point a brief overview of the format followed in presenting the results of this investigation may serve to

\(^1\) "Social learning theory" is used in the cigarette smoking literature to refer to a general set of theoretical positions which share an emphasis on behavioral factors and includes the concepts of operant and classical conditioning, modeling based on imitation and social reinforcement, and behavior modification.
orient the reader. From the interview material collected, several case studies are presented in Chapter III to illustrate the extensiveness of the interviews, the wide range of issues covered, and the variety of individual patterns that emerged. Nonsmokers as well as smokers were interviewed in order to explore the factors preventing experimentation with cigarettes as well as those related to the development of a regular smoking habit. Thus, the case studies aptly demonstrate that neither smokers nor non-smokers are homogeneous groups, an important point which all too often is overlooked by researchers in this area.

In addition to showing the heterogeneity of smokers, this study treats smoking itself not as a unitary, static phenomenon but as a process. While boundaries between the various phases of any process are not rigidly drawn, more or less distinct stages can be identified for individual focus and in-depth consideration (Dunn, 1973). This has been done here: chapters IV through VII treat initiation, transition, maintenance and cessation separately, although relationships among the stages are not ignored. This approach may prove very useful in practical terms since intervention could occur at any of the stages, and different forms of intervention are likely to be more effective at one stage than another.

Initiation is used here to refer to experimentation with cigarette smoking. Transition refers to the period during which the experimental smoker's habits stabilize into
a fairly consistent pattern (for the individual) and during which the smoker usually acquires a self-image as a smoker. Maintenance deals with the factors which support these smoking patterns over time and the effects of the changing cultural attitudes toward smoking and smokers. The cessation chapter explores smokers' attempts, both successful and unsuccessful, to abstain from cigarettes. Chapter III and chapter VII also deal with the problems of classification (i.e., categorizing smokers) and definition (i.e., what constitutes "quitting"). The literature review relevant to each of these four stages is included as an introduction to each chapter. Finally, chapter VIII draws together the findings and suggests directions for future research.
CHAPTER II

METHODOLOGY

The qualitative methodology used in this research is a method only occasionally employed in psychology. An in-depth unstructured interview technique was utilized for the purpose of generating hypotheses which could be tested by more quantitative means in later studies. It was proposed that by examining the issue of cigarette smoking from the perspective of the individual, a more thorough understanding of the important factors relevant to initiation, transition, maintenance and cessation would emerge. In addition, such a method would allow for an examination of the perceived interrelation between factors, as opposed to the objective correlations that emerge from other research methods.

As will be evident in the following chapters, studies on cigarette smoking are voluminous. Each of these studies has helped delineate the variables (psychological, physiological and psychosocial) that are correlated with, or potentially predictive of, cigarette smoking. However, despite the abundance of research and, in some cases, the sophistication of the research design and statistical analysis, we remain ignorant of the relative subjective importance of many factors. We also lack understanding of the relevance of the
variables at different stages of the smoker's career. While
some studies have implied that the same factors account for
the behavior at all stages (Eysenck, 1973; Kline & Storey,
1978; Steward & Livson, 1966), others have argued (Dunn,
1973; Mausner, 1973; Williams, 1971) that different factors
or different weightings of the factors are germane at
sequential stages.

In addition to this confusion over the importance and
interrelationship of the factors few, if any, researchers
have attempted to examine smoking behavior from the point of
view of the smoker. The behavior has been examined by use
of questionnaire, experiment and physiological measurement,
but not by in-depth open-ended interviews of the actors
themselves. The assumption has been that individuals cannot
reliably report on the factors that are related to their
behavior, whereas scientific observers can discern (with the
aid of statistical analysis) the relevant dimensions. This
stance is not surprising as it is the basic tenet of
scientific study--objective observation. This method,
adopted from the natural sciences, has proven itself time
and time again. However, in recent years, psychologists
have begun to argue that we limit our understanding of human
behavior when we neglect (or reject) an exploration of the
behavior from the perspective of the individual actor

It is not that the individuals' subjective perceptions
of their experience are more accurate than objective
observations. However, because individuals act on their own interpretations of events it is important to include this perspective in the study of behavior.

The method of study of behavior from the individual's perspective has long been used in sociological research, particularly in the early study of a research problem. The method has been advocated for hypotheses generation and for the development of grounded theory (Filstead, 1970; Glaser & Strauss, 1967; Lofland, 1971).

Grounded theory is the development of theory from data—an inductive approach, as compared to the standard deductive approach in which theoretical premises lead to hypotheses which can be tested through data collection. The former type of research is called qualitative research, whereas the latter is referred to as quantitative. Qualitative research most commonly consists of in-depth open-ended interviews and field research on the phenomena in question. Glaser and Strauss (1970) argue that this method has been neglected in social and behavioral science research. They submit that the emphasis has been placed on testing hypotheses rather than determining what hypotheses are relevant to the area of study:

We contend that qualitative research—quite apart from its usefulness as a prelude to quantitative research—should be scrutinized for its usefulness in the discovery of substantive theory. (p. 288)

Glaser and Strauss (1970) distinguish between substantive theory and formal theory. By substantive theory they mean
"the formulation of concepts and their interrelation into a set of hypotheses for a given substantive area" (p. 288) such as, in the present case, cigarette smoking. By formal theory they mean theory of a conceptual area such as socialization, reward systems, or deviant behavior. Allowing for the emergence of substantive theory through qualitative research enables the researcher to determine which formal theories are relevant to a substantive area. Without this step, one applies formal theory directly to the substantive area under the assumption that formal theory will supply all of the necessary hypotheses. According to Glaser and Strauss (1967):

The consequence is often a forcing of data, as well as a neglect of relevant concepts and hypotheses that may emerge. Our approach, allowing substantive concepts and hypotheses to emerge first, on their own, enables the analyst to ascertain which, if any, existing formal theory may help him generate substantive theories. He can be more faithful to his data rather than forcing it to fit a theory. Substantive theory in turn helps to generate new grounded formal theories and to reformulate previously established ones. (p. 34)

The studies on cigarette smoking exemplify this proclivity to allow formal theory to supply the hypotheses. Cigarette smoking has been studied primarily within the framework of the assumptions of intra-psychic theories, social learning theory and the medical model. The limitations of these theories to an understanding of the behavior has been discussed. For now, suffice it to say that we may be premature in limiting the hypotheses on cigarette smoking to models that, ultimately, may not be viable. It is time
to allow the objects of our study to suggest factors that are relevant to their behavior. This course will not lead immediately to the development of new grounded formal theory. However, it will allow us to generate new hypotheses and to re-examine the assumptions and hypotheses of the substantive area. This is the goal of this dissertation.

Not only is qualitative research particularly suited to hypotheses generation; it also provides a perspective frequently lacking in behavioral science research. Yet it is precisely in the behavioral sciences where this approach can make a unique contribution:

To acknowledge the unique prerogative of the behavioral scientist to understand that which he studies— to combine both the inner and outer perspective of knowing—in no way detracts from the scientific nature of the behavioral sciences. The dual perspective is of great utility in trying to assess the possible forms of behavior. The ability should be utilized not relegated to second-class inferior status. Then, and only then, will the behavioral scientists' interpretations be both valid and reliable. (Filstead, 1970, p. 5)

Examples of the value of qualitative methods can be seen in Liebow's *Tally's Corner*, a study of black street-corner men, and Wiseman's *Stations of the Lost*, a study of skid row alcoholics, two excellent examples of the potential of this approach. Not only did each study allow an examination of complex behaviors from the perspective of the individual, but each shed light on some of the inadequacies of research conducted without this perspective and opened new areas for further exploration by qualitative and quantitative methods.
Although this dissertation does not include the participant observation aspect of the Liebow and Wiseman studies, it is designed to serve a similar function in the area of cigarette smoking. The purpose is to put aside the variables and categories examined in previous studies and, through the accounts of the actors, study the meaning of the act of smoking to the individual and examine the factors and interrelationships that emerge as relevant for understanding cigarette smoking. Past research then will be re-examined in the light of this new perspective in an attempt to suggest directions for future research.

Subjects

At the inception of the study it was decided that a relatively small sample would be used because of the nature of the research. As Lofland (1971) notes, studies based on intensive interviews usually use between 20 and 50 subjects. The sample size is limited by the volume of unstructured material collected in the interviews and the consequent problem of material management.

In the current research 47 participants (26 women and 21 men) were interviewed regarding their smoking (or non-smoking) histories. The original plan of the study was to interview 30 current smokers or ex-smokers and 20 non-smokers. The number of current smokers and nonsmokers in the final sample will be given as approximate numbers because, as will be discussed in Chapter III, the definition
of the smoking status of some of the respondents was open to interpretation. Thus, the final sample contained approximately 30 current smokers or ex-smokers and approximately 17 nonsmokers.

Since the intent was to interview subjects from a variety of occupations, age categories and educational levels (see Appendix A for a summary of subject data) subjects were recruited through a variety of sources: college classes, friends, acquaintances, colleagues, a fire station, and referrals from subjects. An attempt was made to recruit subjects with a variety of smoking patterns and histories. The main limitation of the final sample was an over representation of more educated subjects.

Although a diversified sample was sought, no claim is made that the sample is random. The subjects ranged in age from 18 to 48. Twenty-two of the subjects were interviewed in Southern California and 25 were interviewed in New Hampshire. Although the subjects were interviewed in these locales, many of them grew up in other areas including the Midwest and South. The subjects were interviewed in the two locales because it was felt that such sampling would contribute to a more diversified sample. For example, the nonsmokers' rights groups have been more active in Southern California than in New Hampshire and it was hoped that the relative impact of these groups on smokers and nonsmokers could be ascertained.
Since a period of 36 months elapsed between the original data collection and the analysis and write-up, it was possible to informally update the data on 18 of the original respondents with whom direct or indirect contact had been maintained. In the instances where the respondent's smoking status had changed the information was incorporated into the discussion of the findings.

Data Collection

When subjects were contacted they were informed of the purpose and nature of the study. It was explained that the respondents to the interview were to be considered co-investigators, cooperating in an attempt to examine how people view their own smoking and motives for smoking (or not smoking). The unstructured nature of the interview was discussed and, if the subject requested, he or she was permitted to look over the interview outline (see Appendix B). It was explained that the outline would serve as a checklist of points to be covered but would not be adhered to rigidly as the goal was to have the respondent relate his or her own story.

Following the description of the goals of the study and proposed use of the data, the subjects were assured that their anonymity would be preserved in the write-up. Interested participants were asked to read and sign an informed consent agreement (see Appendix C). All subjects who were asked to participate agreed to do so.
The interviews took place between June and October, 1979. The setting for the interviews varied according to the wishes and convenience of the participants. Interviews occurred in participants' homes, dormitory rooms or places of employment, as well as empty classrooms, parks, or my own home or office. The length of the interviews varied from 1½ to 3½ hours, depending upon the smoking status of the subject and the length of his or her smoking history.

During the interviews the subjects were encouraged to tell their story as seemed appropriate to them. A conversational tone was used and clarification or elaboration was sought as needed. If all topics in the outline were not covered by the conclusion of the interview, those topics were raised at that point. In many cases new issues were pursued and then incorporated into subsequent interviews.

Extensive notes were taken during the interview. A method of speedwriting combined with a few shorthand symbols provided a fairly complete recording of the respondents' stories. It was decided not to use a tape recorder because of possible discomfort on the part of the respondent. In retrospect this appears to have been a sound decision as the notes were quite complete. Immediately after the interview additional notes regarding the context of the interview and impressions of the respondent were added. The notes were typed and, as much as possible, organized around the outline in Appendix B.
One further point should be noted about the interviews. In recent years it has become apparent that many people have strong feelings about cigarette smoking. Some cigarette smokers are angry about attempts to interfere with what they perceive as their right to smoke. On the other hand, some nonsmokers are angered by what they perceive as the annoying and/or dangerous effects of cigarette smoke to the non-smoker. Because of these potentially strong feelings, every attempt was made during the interviews to be supportive but neutral on the issue. Also, because of these potentially emotional responses, I decided to refrain from smoking while interviewing nonsmoking respondents who did not know of my smoking status. This frequently resulted in what I perceived as strong anti-smoking comments by some nonsmokers who may have been more tentative had they known of my smoking status. This deception was unfortunate but judged necessary to obtain more spontaneous and truthful responses from nonsmokers regarding smoking. It should be noted that not one of the nonsmokers asked about my smoking status during the interview. It may be that people assume that, primarily, nonsmokers do research on smoking.

Data Analysis

The questions in the interview outline were focused around four general concerns: (1) the factors that the smokers reported influenced their decision to experiment with cigarettes; (2) the factors that the smokers viewed as relevant to transition to regular smoking; (3) the factors that
the smokers viewed as maintaining their cigarette smoking; and (4) the factors that the smokers perceived as affecting their decision and/or ability to abstain from cigarettes. These questions provided the overall structure for the categorization of the subjects' responses. It should be noted that the respondents had not been asked to theorize about their smoking histories. Rather, the events, motives, and perceptions that they reported were systematized and analyzed to form the basis for the generated hypotheses.

Lofland (1971) detailed the strategies available for organizing and analyzing the data collected from unstructured interviews and his recommendations were followed. Notes from the interviews resulted in 278 typed pages. Each interview was given a number to avoid confusing the responses. Three copies of the data were made so that several copies could be cut and sorted into files.

To begin the organization and categorization process the interviews were read in their entirety in order to become familiar with each subject's history. Four file folders, containing each subject's responses relevant to the questions mentioned above, were developed. Thus, all responses relevant to initiation were included in one file; all responses relevant to maintenance were included in another file, etc.

The subjects' responses for each file topic then were re-read and additional files, related to more specific research questions within each general topic, were
generated. The end result was four file folders containing each smoker's complete initiation, transition, maintenance and cessation story and 23 additional files containing each subject's responses to more specific issues within each general topic. Separate files were developed for the never smokers.

At this point, each subject's complete smoking (or non-smoking) history was written in chronological order. This provided a useful reference guide for maintaining the context of the more limited responses in the topic files. It also provided a briefer and more coherent history than the complete interview notes.

The next organizational task was to re-read the interviews to ensure that all the information from each interview relevant to each file had been extracted and filed accordingly. Where omissions were found they were added to the appropriate files. This resulted in the development of several additional files to contain ancillary yet inter-related topics deemed important to discuss.

The last organizational phase was the development of a detailed outline to order the files by sequential questions regarding the development of regular smoking patterns. This structure was, to some extent, modeled after Becker's (1963) work on stages to marijuana smoking and Lindesmith's (1947) stages to opiate addiction. The goal was to seek: (1) sequences of changes in attitude and experience which led to the use of cigarettes on a regular basis and (2) sequences
of changes in attitude and experience which led to cessation of cigarette smoking. Specific topics were incorporated into this general analytic structure.

In summary, the notes were organized around the four stages of a smoker's career--initiation, transition, maintenance and cessation. The interview notes were analyzed for the notable events relevant to each stage, as well as the sequence of events that led to a progression from one stage to the next.

Advantages and Disadvantages of the Method

As discussed in Chapter I, an understanding of cigarette smoking has been limited by the preponderance of studies employing a singular methodology. Few studies have used other than unidimensional designs and fixed response measures.

There are advantages to employing a variety of methods in the study of cigarette smoking. If the researcher finds the same variables surface as important through different methods, he or she is more confident that these factors are, indeed, salient to the issue under investigation. This triangulation also facilitates the operationalization of the terms or categories thought to be germane to the issue. If an operational definition of a term appears applicable with one methodology but not another, the researcher can refine or broaden the definition to include more relevant concepts. In addition, what appears as error variance in methods employing statistical analyses may be a rich source of information for more fully understanding the behavior in question.
Finally, the focus in the overwhelming majority of studies on cigarette smoking is on the variables, whereas the qualitative methodology allows the focus to be on the person. The potential is that types of people and personal histories rather than types of variables may emerge.

In addition to the supplemental information gained by using different methods, there are unique advantages to the unstructured interview, particularly when the method is used to examine a substantial history of the behavior. When one takes a holistic, as opposed to piecemeal, approach, sequential attitudinal and behavioral stages are more likely to be revealed. In the study of cigarette smoking we are more likely to see the different routes to becoming a smoker as well as "process" aspects related to the frequently observed pattern of smoking, quitting and returning to smoking. The method also opens up areas of study in which knowledge is sparse, such as the transitional stage in becoming a smoker--a stage which is difficult to examine without costly longitudinal studies.

The unstructured nature of the questions reflects certain advantages. Whereas structured formats limit the responses to those deemed salient to the researcher, unstructured formats are more likely to reveal what the subject sees as relevant to the behavior. Unstructured formats are more likely to expose the areas hidden in shades of gray. Interrelationships that even multivariate designs may not reveal are more likely to appear. Finally, the richness
of the data and the unique potential for hypotheses generation are, in themselves, invaluable.

There are, however, limitations to the unstructured interview method as well as limitations resulting from the way it was utilized in this research. Since the interviews, to a great extent, dealt with historical accounts of the individuals' smoking behavior, the data are retrospective. Retrospective accounts, no doubt, are subject to distortion as past events are modified by recent experience. This is not to say that the information should be discredited. As Trow (1970) acknowledged in discussing the relative merit of interviews and participant observation methods:

The amount of information people can tell us, quite simply and reliably about their past experience, is very great; and it is only in light of that information, I would maintain, that we can frequently understand their behaviors in the "here and now" that the participant observer is so close to. (p. 146)

The important point is that retrospective accounts should be considered a valuable source of information, while at the same time acknowledged to be subject to bias. As this research is intended to generate rather than confirm hypotheses the concern should be noted but not used to discount the data. It should be mentioned that retrospective accounts of one's motives and behavior may be, in some instances, more objective than evaluations that occur at the time of the behavior. It sometimes is easier to gain perspective on the plurality of factors affecting behavior when one gains distance from their influence.
Self-report data also are open to the question of whether the respondent has been honest with the researcher or, possibly, honest with him or herself. The smokers in the sample may have felt some reserve due to the negative social sanctions for smoking; however, the fact that they were being interviewed by a fellow-smoker may have attenuated their concerns. In addition, the respondents in this investigation were regarded as co-investigators and were fully aware of the nature of the questions to be asked before they agreed to participate.

Dishonesty with oneself is more difficult to judge. Self-deception in self-reports may take the form of confabulation; the distortion and filling in of made up facts. The problem is compounded because scientific accounts of smoking have been so well-publicized as to become part of the public domain. The terms used by the respondents did legitimize such concerns. For example, several subjects used the term "peer pressure" in explaining their initial smoking experiences. Further elaboration, however, provided a clearer picture of their experiences which often were at odds with a simplistic notion of peer pressure. Thus, the problems with terminology were reduced by the depth of the questioning. It was impossible to determine if the knowledge of the scientific concepts had restructured the individuals memory of events. Confabulation has been observed to occur with a variety of retrospective accounts (Wortman & Loftus, 1981). The tendency to impose order on
remembered events is a problem encountered in any self-report format and may only be restricted by the use of strictly behavioral or physiological measures.

Another limitation of unstructured interview data is that the responses are filtered through the investigator. Obviously a similar problem exists in fixed-response measures where, by specifying the possible answers, the investigator has imposed his or her own schema onto the respondent. The filtering in unstructured interviews comes during the interviews, particularly when responses are not tape-recorded. Although every effort was made to write the responses in their entirety, some digressions from the topic were omitted. In analyzing the data the responses again are filtered through the investigator. The investigator can do no more than make every effort to understand the information from the respondent's perspective.

Sample size is limited with an unstructured interview method. Because of the large amount of material generated, the sample size is, by necessity, small. The sample was not randomly selected although a diversified sample was sought. These factors limit comparison between groups and limit generalizations. These restrictions do not, however, limit hypothesis generation as Glaser and Strauss (1967) point out:

Generating hypotheses requires evidence enough only to establish a suggestion—not an excessive piling up of evidence to establish a proof, and
thus consequent hindering of the generation of new hypotheses. (pp. 39-40)

Nor do these restrictions undermine the reliability of the findings. Kidder (1981) attempted to bridge the gap between qualitative and quantitative methodologies by applying quantitative criteria for reliability to qualitative research. She discussed how reliability is determined in qualitative research:

When participant observers list repeated instances of an event, the list serves as a reliability check. It shows that the event (and the variable it represents) occurs and that the concept is not based on a chance observation. (pp. 246-247)

According to Kidder an important feature of qualitative methods and conclusions is the consistency of the evidence:

Reliability in fieldwork lies in an observation's not being contradicted and proved wrong rather than its being repeated in detail. (p. 248)

Since the goal of this research was hypothesis generation rather than hypothesis testing, the in-depth unstructured interview method was selected. The unstructured interview method allowed for a depth of analysis unavailable by other methods. The retrospective, historical aspect allowed for breadth of coverage. The phenomenological perspective allowed for the respondents' evaluations of relevant factors to emerge. This is important because, as Thomas (1928) observes, "If men define situations as real they are real in their consequences" (cited in Lofland, 1971). Or, as Lofland (1971) explains, "A part of an
account of some variation can be associated with variations in participants' beliefs about the causes" (p. 63).
CHAPTER III

FIVE ILLUSTRATIVE CASES

The original intent of the research was to interview current smokers, ex-smokers and nonsmokers. A literature review and my own discussions with smokers and nonsmokers had suggested the variety of patterns that would emerge. Nonetheless the richness of the data was unexpected. While there were similarities in the smoking histories and smoking patterns of the respondents, each person's story was unique and provided additional insight.

Five of the cases are presented to furnish the reader a more complete picture of the smoking histories of at least a few of the individuals. The stories of Brian, Audrey, Richard, Maggie and Lance were selected, not because they were necessarily the most typical of a particular type of smoker or nonsmoker, but rather because their stories provided the broadest coverage of the issues to be discussed in the following chapters.

The five cases will be followed by an explanation of the smoker categories that emerged from the interviews:

Brian - Constant smoker. A 33-year old man who has smoked consistently since he was 13 years old.

Audrey - Intermittent smoker. A 34-year old woman who has smoked sporadically for over 15 years.
Lance - Never smoker. A 31-year old man who never has had even one puff of a cigarette.

Richard - Short-term smoker. A 24-year old male who originally indicated he had "tried cigarettes a few times" but was discovered to have smoked rather consistently for several years.

Maggie - Ex-constant smoker. A 31-year old women who was a constant smoker but who has abstained from cigarettes for three years.

A Note on Terminology

The use of the expression "quit smoking" implies a more permanent abstention from cigarettes than frequently occurs. While people use the term to express the intention to permanently abstain from smoking, only the passage of time reveals the permanence of the behavior. Because the current data are retrospective, the respondents were able to clarify their meaning when they reported that they "quit" smoking.

Unfortunately, no single word seems to convey concisely the distinction between temporary and permanent abstention. In the ensuing discussion the term "abstain" will be used to convey a temporary condition and the terms "permanent abstention" and "permanent cessation" will be used to describe an apparently permanent condition. While this wording may appear more cumbersome at times, it is hoped that it ultimately will provide greater clarity.

A similar problem occurs when the term "ex-smoker" is used. At any given point an individual abstaining from
cigarettes may define him/herself as an ex-smoker. However, many smokers return to smoking after abstention periods. Thus, the term "ex-smoker" will only be used when the abstinence period is of sufficient duration to indicate that permanent abstention from smoking has occurred.

**Constant Smoker - Brian**

Brian is a 33-year old technician who has been married for 10 years to a nonsmoker. They have one child under a year old. He usually smokes less than a pack of cigarettes a day although, since the baby was born, he has been smoking two packs a day. He attributes his increased smoking to greater tension at work and the baby--his first. He always inhales for "a fix." He wishes he were not a smoker and would like to abstain permanently from cigarettes.

Brian lived with his aunt and uncle when he was 2 to 13 years old. His father died and his mother was unable to take care of him, although she did visit him every other weekend.

His uncle smoked, both cigarettes and cigars, but did not say much to Brian about it. His aunt did not smoke and "was always on my uncle to quit--she only let him smoke in certain places." Brian remembers being very happy while living with them.

Brian's mother remarried and moved to another town when he was 13 and he moved in with her and his stepfather. He
got a paper route in the new town and began his smoking career:

I started smoking alone. I would get a pack and put them at the bottom of the paper bag and pull over and have one once in awhile. At that point I smoked very little. I would test one out every day and still was getting a buzz from it. I didn't know anyone else who smoked and can't remember why I decided to smoke.

He did recall his feelings at the time:

After I moved in with my mother and moved to another state I was scared to death. I was living with a mother I didn't really know and a stepfather I didn't know at all.

His mother was a domineering woman whom he grew to resent; but he thought his stepfather was "fantastic." Neither his mother nor stepfather smoked. His mother never had smoked and was disapproving when she discovered that Brian smoked. His father had died of a lung disease and her objection to Brian's smoking was closely related to that. Brian's stepfather had been a heavy smoker but had ceased by the time Brian knew him. He was tolerant of smoking and stayed out of the argument over Brian's smoking. "He didn't think I should be smoking at that age but didn't jump on the bandwagon."

Brian had two older brothers but he was not close to either of them as they never lived in the same places that he did. Although Brian rarely sees his brothers he knows they are heavy smokers.

Since Brian's parents did not know he smoked until he was in high school, he had to hide the cigarettes initially:
I had the paper route for three years and continued smoking. I had to hide the cigarettes in the junk yard at the end of the route. I would rush to deliver the papers in order to have a smoke. I think I enjoyed smoking from the beginning.

As he became acquainted with people at his new junior high school he joined a group that did the same thing he did:

I had a hero when I first went to the school in the new town. He smoked. He was a real Fonzie type--tall, macho. This guy had everything. I already had started smoking but this fellow had a lot of influence. We smoked in the bathroom together. I can't associate the smoking with the macho thing--maybe it was--sort of. I don't remember bragging about smoking but I did practice my smoking style. The big thing was to get in the bathroom and smoke a cigarette and get away with it. There was a lot of smoking in the bathrooms.

In high school Brian smoked at every opportunity. There was a smoking area behind the football field but "it was a big game to go in the bathroom and smoke between classes." At lunch he and his friends would go "cruising" and smoke:

At the corner down the street there was a service station where there was a pinball machine. The fellow there (a man in his forties) let us keep our cigarettes in a drawer. It was near the bus stop so all the guys would get their cigarettes and take them to school and then lock them away again on the way home.

They would also go to get their cigarettes before going to the bowling alley or lock their cigarettes in a locker there. It was in the bowling alley that his mother found him smoking:
She was really angry. She made me eat the cigarette right there! They were awful. I was disciplined and that was more incentive to smoke. I kept smoking and through my stepfather's actions I was allowed to smoke but not in the house. Mother was disapproving but tolerated or accepted it.

Brian considered high school "just a place to meet girls. I wasn't against school--I just wasn't into it." It was in high school that Brian defined himself as a smoker. He thinks he knew about the hazards but did not feel the dangers applied to him. When asked if he considered himself rebellious as a teenager he said "Hell no, there's no one more easy going than me--I'm a lover." He reported, also, that he never drank in high school and still drinks very little because he cannot tolerate beer and has a "nervous stomach." He never tried any drugs.

During high school Brian worked part time and smoked at work. After school he went to work for the telephone company for six months. "You can't be a telephone man unless you smoke and drink coffee." Then he joined the military for three years. Most of the fellows smoked there. After he left the military service he got married and went to work for the telephone company again.

Brian's wife never has smoked:

She doesn't like it much but she puts up with it. She tries to get me to quit but doesn't push it--it's not a nagging situation --it's more of a concern.

One of Brian's attempts to abstain from cigarettes was related to the fact that his wife doesn't smoke:
I quit for 3 weeks in 1976. It was in the summer and I quit for no particular reason. It was difficult—I ate life saver suckers instead. I started again because my wife and I separated. Smoking has certain effects on a marriage when one is a smoker and one isn’t, so quitting may have been an attempt to solve one of the problems.

Brian changed to a low tar and nicotine cigarette when he was sick a few years ago.

I had a bronchial infection and a bad sore throat and my regular brand hurt. I was also starting to be conscious of the fact that smoking was a bad thing. There was a period of 4 or 5 days when I was so sick I couldn’t smoke and then I tried to smoke and it hurt so I switched to a low tar and nicotine brand.

Brian’s other cessation attempts have been more short-lived. He went without a cigarette until noon when a local television station sponsored a "smoke out." On his birthday he "lasted until 9:00 a.m." Although he always wants to abstain, the positive effects were not as great as he expected when he did manage to abstain for 3 weeks:

I always think I’ll feel great when I quit but I don’t. Maybe I’ve gone so long feeling like I do that I don’t know how it would feel. I guess food would taste better—and my mouth would taste better. Now I have to add lots of spices to foods.

The difficult part of abstaining for Brian is the withdrawal. He does not worry about gaining weight—he said he would gladly put on 20 pounds if he could cease smoking. In the last 6 months he has begun to notice symptoms from the effects of his smoking. His throat has felt raspy and his chest, congested:
I don't cough much except for an occasional coughing fit but a cigarette and coffee will calm that down. There's a spot at the back of my throat that feels good when I smoke.

When asked why he smoked Brian said:

If I knew the answer to that I wouldn't smoke. I get angry with myself. I don't get pleasure out of it any more--except after a good meal and the first one in the morning and a few during the day.

He has his first cigarette with his first cup of coffee. Coffee is a particularly strong cue for smoking. He doubts if he ever has a cup without a cigarette. Also, he particularly likes to smoke after he solves a problem or gets something done.

Brian is aware that smoking bothers some people:

In the presence of people that it bothers I will leave to smoke. I don't smoke in my mother-in-law's house or in supermarkets or stores. In restaurants it depends--if someone else is smoking I will too. If I don't see an ashtray I won't smoke. I hate people who put cigarettes out in their plates. I try to be considerate. I think people generally tolerate smoking--tolerate my smoking. Sometimes I get vibes though.

Asked how he felt about the possibility of laws that restrict smoking, or dividing public places into smoking and nonsmoking sections, he said:

I wouldn't be against divided places but don't think there should be laws because of the amount of money it would cost. In restaurants it doesn't make any difference to me if they're divided but I think it's good for those who don't smoke. My wife usually takes the smoking section for her choice. I can last in the no-smoking section if we don't sit around too long.
Brian was less accepting of nonsmoker rights groups:

I think they're a bunch of self-righteous ex-smokers. There's nothing more obnoxious--particularly those who say "If you really want to quit you can."

The interview took place in 1979. I saw him briefly in 1982 and he was still smoking.

**Intermittent Smoker - Audrey**

Audrey is a 34-year old teacher who has been married for 8 years and has two children under 5. Both Audrey and her husband are intermittent smokers. Her average smoking rate is two to three cigarettes a day, although it varies considerably. She often smokes quite a few cigarettes when out with friends and then abstains for several days.

Audrey grew up in a small town in the Midwest. She has three older brothers and a large extended family. Her maternal grandparents, aunts, uncles and 30 first-cousins all lived in the same small town.

Her mother never smoked and never wanted Audrey to smoke. She was the oldest of four sisters and the only one who didn't smoke:

Mother complained a lot about her sisters smoking. When they were at their mother's house they would go in the upstairs bathroom to smoke so Grandmother wouldn't know and it always irritated my mother that these 40 and 50-year-old women would sneak. I never sneaked--I was the only one to smoke in front of Grandmother. I said I wasn't going to sneak and she appreciated that.

Audrey and her own mother did not get along but she adored her father. He smoked a couple of cigars a week. He
was a heavy drinker and smoked mainly when he drank. He did not want Audrey to smoke but was more accepting of her smoking than her mother, "but he was a lot more accepting in general."

All three of her brothers smoked cigarettes before Audrey began, as did four of her cousins. Audrey thought that all of the brothers started smoking after they graduated from high school. One brother no longer smokes but the other two, who smoke regularly, have failed at their cessation attempts.

Audrey's first experiment with cigarettes was in the eighth grade. She and a girlfriend decided to try a cigarette and, although it made her sick, she enjoyed the drama of the experiment. Her mother found out and "had a fit but chose to blame it on the other girl."

She never smoked in high school and did not remember her friends smoking. She thought some of the students may have smoked in the bathroom, "but I was such a good girl and too chicken to look." She remembered that one of her cousins got into trouble for smoking at school. Audrey was active in intramural sports and president of several service clubs.

Audrey's experimental smoking began during her freshman year in college when she lived in the dormitory. The experience had a dramatic conclusion:

A friend said she would teach me how to smoke so I wouldn't look dumb if I went to a fraternity party. In the middle of
smoking the cigarette I got a long distance phone call and went down to answer it and left the cigarette burning. It burned a hole in the mattress. The dorm mother said I would have to pay for it so I had to call my father and tell him. He sent the money and didn't tell my mother. He wasn't too upset.

Despite this catastrophic beginning Audrey continued to smoke, but infrequently. She borrowed others' cigarettes and smoked while chatting with girls in the dormitory or with her boyfriend, who went to another college.

During Thanksgiving vacation, while attempting to smoke in public for the first time, Audrey was seen by her father:

He looked very disappointed. He didn't care that boys smoked but he thought girls shouldn't. Even though I was smoking I really felt the same way.

During Christmas vacation that year Audrey smoked in front of her mother:

I was at home and my boyfriend had come, too. He lit a cigarette and I asked him for one. He was surprised and I asked again. Mother was making cookies and getting madder and madder and finally said she didn't intend to support my smoking habit. I said it wasn't her money anyway—it was my allowance which was my father's money. I think I smoked to get a reaction from Mother.

That spring Audrey changed to a small, private religious college. Her roommate did not smoke but half of the girls on the corridor were experimenting with cigarettes. Audrey had one girlfriend with whom she shared packs. At
this point Audrey never smoked on dates but the girls would have chats every once in awhile and she would smoke then.

That summer, after flunking out of school, she worked in a summer camp and did not smoke there. Her college roommate, who did not like smoking, was also at the camp and none of the other counselors smoked. The next fall she worked as a waitress. She did not smoke even though a lot of the other waitresses did, because she was living at home and "it wasn't worth the hassle."

The next spring she returned to the private college and started smoking again. She smoked about one pack a week, on the average, but smoked more heavily on weekends if she was drinking. She also smoked at home on vacations although she tried not to. Two of her friends were heavy smokers. Audrey was enjoying smoking and always inhaled:

I realized even then that it wasn't a particularly good habit but don't think I ever thought about the health hazard. A few years after I left school I was dating a fellow who worked in a hospital and he told me about the black lungs of cadavers and I just thought it was interesting. I didn't try to quit, I just didn't smoke in front of him. Most of the fellows I dated didn't smoke and didn't like it but nobody seemed to change my opinion--I went right on smoking. At this point I was living with three women and two of them smoked.

When Audrey met her future husband he was a smoker, having started in college. His smoking style was, and is, much like hers, although he smokes less. Audrey does not really see him as a smoker. His heaviest smoking is during
stress periods. They frequently share a cigarette and a pack since his would become stale if he kept them long enough to smoke all of them.

Audrey doesn't define herself as a smoker. She doesn't smoke at work and never, or rarely, smokes alone unless talking on the telephone. She rarely smokes in the morning and sees that as a difference between herself and a real smoker:

If I smoke a lot in the evening I feel terrible the next day and say "why do I do this to myself?"

She has attempted to abstain permanently from smoking several times. The first time she was 29 and she and her husband were moving to another state. They abstained because they did not want to smoke while driving across the country. Both quit "cold turkey" and neither found it difficult. After she ceased smoking she found out that she was pregnant and did not want to smoke during the pregnancy:

I have a big thing about pregnant women smoking. I get really hostile. I'm apt to go up to strangers, if they're pregnant, and say something about how they're damaging their children.

Audrey is particularly concerned about smoking around her children. She will not smoke around the children in an enclosed area. Her 4-year-old son does not like her to smoke and he gives her "a hard time" when she does. He says the smoke makes him cough. She's concerned about modeling smoking for the children.
Her first abstinence period lasted 1 1/2 years. She resumed smoking because she had finished breast-feeding and was tense and nervous because she was changing jobs. Fairly quickly she went back to smoking a pack every 2 to 3 weeks.

Two years ago Audrey abstained again, for 10 months.

I quit because I wanted to—as a matter of fact I always want to quit but I never lose the desire to smoke and don't enjoy arguing with myself about it.

She started smoking again when there was a school strike and she felt a lot of stress because she was crossing the picket lines. When she started again she smoked the most she ever had smoked—10 to 12 cigarettes a day for about a month and a half. Since that time she abstains every month or so for a few weeks and then "gives in." Sometimes she limits the number of cigarettes she smokes and at other times she does not. She tries to abstain at times that are not stressful. One of her friends gives her a lot of reinforcement for not smoking.

Whenever Audrey abstains she does so "cold turkey."

Her husband, on the other hand, just tries to cut down. He doesn't say much about smoking but tries not to smoke around her when she is trying to abstain:

But I see him as smoking so sporadically that it's hard to tell when he's cutting down. He goes 2 or 3 days without a cigarette. When I'm in a smoking period I generally don't go a day without smoking.

Audrey usually has been the supplier of cigarettes for her husband and has smoked more heavily, until recently:
He's had a rough year—he's been unemployed for a few months—and has had a lot of tension. He knows it's bad to smoke and resents smoking but gives in to it.

Audrey is concerned about how her smoking affects others:

I believe it affects others' health—even if you can't see the smoke. I also believe it is bad environmentally. I try hard not to smoke in restaurants. If I think I'm in a corner and not bothering anyone I'll smoke but otherwise I won't. If I know someone is a nonsmoker and I go to their house I'll smoke outside—unless I'm having a really good time and then I feel like it's their fault! Just kidding!

Audrey believes that nonsmokers have the right to be free of cigarette smoke:

Once when I was working in an office it bothered me when smokers would insist it was their right to smoke in the middle of the office. I think nonsmokers have the right to be free of smoke but I don't know what can be done about it. I would be happier if people couldn't smoke in public places and would vote for, and abide by, such a law.

Audrey is less enthusiastic about the nonsmokers' rights movement:

I believe they are necessary but they could be less dramatic and get better results.

At the time of the interview Audrey was trying to abstain permanently from cigarettes. How successful she was is not known.

Never Smoker - Lance

Lance, a 31-year old manager of a large company in the Midwest, has been married for 10 years and has three
children under 10. He never has had so much as a puff of a cigarette.

He grew up in a small community in the Midwest. Although he was an only child he had a rather large extended family. Both sets of grandparents lived within five miles of his house. He had 12 sets of aunts and uncles, but was close to only the ones on his mother's side.

Lance was surrounded by smokers. Both of his grandfathers smoked about a pack of cigarettes a day and all of the aunts and uncles on his mother's side of the family smoked. His mother was, and is, a regular smoker but his father has abstained from cigarettes since before Lance could remember.

When he was young, Lance developed a negative attitude toward cigarettes. He recalled that his mother believed there were worse things to do than smoke. She would say "I need my coffee and my cigarettes." She did not want Lance even to experiment with cigarettes:

She knew she never had to bug me about it because she knew how I felt about smoking. She made a big deal out of smoking. She carried her ashtray with her all the time throughout the house--she was a fanatic about cleanliness. The house was like a mortuary. And she worried about fire, so at the end of the day she'd take a wet paper towel and wrap up all the cigarette butts and ashes and clean out the ashtray.

Lance remembered one period when he was in junior high school during which his family was having financial worries. He would say to his mother "Why don't you quit smoking and
that will save us a lot of money." That was one of the few
times he remembers hearing her say anything about her own
smoking. She said she enjoyed it and wasn't going to give
it up; and it kept her weight down.

Lance's father had started smoking when he was in the
service and abstained when he came home after the war.
Lance remembers his father later trying to smoke with a
group of people and becoming nauseous. He told Lance that
he preferred that he not smoke saying, "it's a filthy habit
and I can't afford for you to do it."

Lance's father and mother did not argue about her
smoking but his father sometimes complained about how
expensive it was. His parents did argue frequently about
other things.

His first memory of his peers smoking was when he was
in the fifth or sixth grade. He was visiting Bobby, one of
his favorite cousins, whom Lance saw only four times a year.
Bobby was two years older than Lance. As Lance remembered
it:

We went out running around the neighborhood
and as soon as we got outside Bobby started
smoking. He didn't try to get me to try it
but said "Don't you tell. All my friends do
it but you're not old enough." I said I
wouldn't tell. We met some of Bobby's
friends and many of them smoked. Bobby
lived in a rough area and lived a rough
life. I felt good that he thought I was
tough enough to run around with his buddies.

When Lance was in the sixth and seventh grades he
worked in a barber shop, cleaning the floors. He had
developed a negative attitude about cigarettes because he remembered he had to pick up "the damn butts and ashes" there. It was also in the seventh grade that another memorable event occurred:

We had a party in our backyard on Labor Day. The party went on until two in the morning. My mother's friends were smoking and the next morning the yard was full of cigarette butts. I got a rake and raked them up, all the time thinking "what are we going to do about this?" I played golf in the backyard and wanted it to be clean.

Many of his friends started smoking in the seventh grade. They never tried to coerce Lance into trying it but did ask if he wanted to. But Lance already was "turned off by all the ashes and cigarette butts."

In the eighth grade Lance had two teachers who smoked:

When I first saw them smoking I was totally crushed. I don't know why. I was disappointed in them--one was a P. E. teacher and the other was head of all student activities.

It was also in the eighth grade that the physical science teacher did a smoking demonstration using a glass tube to show how the black tar gathers inside of a lung. Lance said, "That had a lot of impact on me."

In high school Lance was not in college preparatory classes. His grades tended to include a few A's but more D's. He was active in competitive sports and dramatics and describes himself as extroverted.

Lance had his own car at 16 years of age and was free to do what he wanted as long as he behaved responsibly. He liked to go to parties and spent three nights a week
drinking coffee and eating pizza with friends. He started drinking alcohol the summer before his junior year in high school and then "did a lot of drinking and running until late hours."

During the summers Lance worked as a lifeguard on the lake and the problem of cigarette butts again presented itself:

I would pick up cigarette butts at the beach. If I saw a butt on a lake I wouldn't go in the water. I'm really turned off by ashes and cigarette butts--I have a real phobia about that. Today I was at the pier watching some fellows fishing and two guys threw their cigarette butts in the water. That bothered me. It's not the smoke--it's the butts and ashes.

In college Lance was president of the "animalistic fraternity" and was active in many groups. Although he rarely dated girls who smoked, his buddies' smoking did not bother him. He met his wife-to-be before she entered college:

She smoked for a short period in college--in the dorm. She was trying it out--smoking maybe a pack a week for one and a half years. She quit because I told her I would leave her if she didn't. I didn't like it but I wouldn't have left. I have a double standard for that with my wife because it didn't bother me with others, including other women. But when I kissed her I could tell and didn't like it.

Lance's present attitude toward cigarette smoking is the same. He has many friends who smoke, and several co-workers. His best friend smokes. He remembers only one person in his adult life whose smoking really bothered him:
I was in training and traveled with this fellow and he must have smoked three packs a day. One time we were in his car and there were ashes all over the floor. He decided he didn't want to smoke in the car so, in the cold, he rolled down the window and held the cigarette out the window. When I got back I told my boss I wouldn't go with him again.

His wife's attitude is very much like his. She does not mind if people smoke around her and they allow people to smoke in their house. He does believe that people who really are bothered by cigarettes should be able to be free of the smoke and would be for legislation that allowed for smoker and nonsmoker sections in public places.

Lance leads a very active life. He jogs and plays tennis and racketball. He spends many nights out with his friends. His attitude toward smoking probably was best reflected in his response to the question, "How concerned or annoyed are you by others' cigarette smoke?" His response was:

You have to exist in the environment in which you live. You could get killed by a car so give it your best shot.

**Short-term Smoker - Richard**

Richard was a 24-year old graduate student at the time of the interview. I had talked to him periodically for several weeks before the interview and he indicated he was very much against smoking. He mentioned that he had tried cigarettes but never gave the impression he had smoked as much as eventually was revealed. It was not until we were
well into the interview that he realized he had smoked quite consistently for several years.

He grew up in the suburbs of a large Eastern city and lived at home until he went to graduate school in New England. His family consisted of his parents, an older brother and an older sister.

His mother never smoked, to his knowledge. She was negative about smoking, thought it a senseless, unhealthy habit and "the roof fell in when she caught my sister smoking." Richard respected his mother though no strong, affectionate bond existed.

Richard strongly identified with his father even though he was a "tiny bit afraid" of him while growing up:

Dad was good to us. He would take us out to play baseball, etc., and did outdoor things with us. He had a short fuse--a hot temper--but I am very close to him now.

His father smoked about a pack of cigarettes a day between ages 20 and 30. He has been an ex-smoker since 1960; he quit when he heard it might cause cancer:

He never smokes now and gave the impression that it wasn't that hard to stop. He quit just like that--a strong-willed man. Now he is vehemently against smoking: "bad for you--will only cause trouble--get that shit out of your mouth!"

Richard's sister started smoking about a half-pack of cigarettes a day in high school. She has abstained since college when, according to Richard, she realized she probably had smoked because of peer pressure.
His brother, "a bum--juvenile delinquent" may have started smoking in junior high school. Richard thinks he ceased smoking about five years ago for health reasons, "although he might smoke other things." The brothers did not know each other well as they did not get along.

Richard's first smoking experience was when he was 11 years old. After school he was with his cousin who was the same age:

Some older tough guy offered us cigarettes and my cousin said, "Come on--you want to try it?" so I did. There was nothing to it--no big deal.

At this time there were others Richard knew who smoked but none of his friends did. According to Richard, the kids who smoked were problem children from poor families--members of gangs. The students were separated in school by level of intelligence and Richard was always in the highest group:

The characters who smoked were in the lower groups. They were Spanish, Puerto Rican and others--hoods. But there were others who weren't hoods, predominantly Jewish, who were into smoking.

Most of Richard's friends started smoking cigarettes and marijuana in the summer between eleventh and twelfth grades. In his senior year of high school one of these friends coerced Richard into trying a cigarette. "You are the only one in our group who doesn't smoke. Try it!" So Richard tried it to "get him off my back." He felt dizzy and may have had more than one cigarette that day and "enjoyed it okay." However, both his brother and sister had
been in trouble for smoking and he did not want to disappoint his parents. His brother was always in trouble and in and out of correction centers. Richard described himself as disciplined and manageable.

Despite his concerns, Richard continued to smoke after this initial trial:

It became ritualistic to stop for a coke or coffee and have a cigarette. I would get a pack at the drugstore where I worked and smoke while making deliveries. Almost all of my friends smoked and I smoked with them.

When Richard started college he smoked in classrooms during exams. During school hours he smoked up to a half-pack a day, but never at home. He would smoke to relax during exams, while doing homework, and in between classes. His parents never learned of his smoking until years later.

The summer of his freshman year of college he went to Italy and continued to smoke. "It was a good way to meet people--a very social thing for Italians." He smoked from 5 to 10 cigarettes a day and enjoyed the Italian custom of sharing packages of cigarettes.

In his junior year in college he smoked marijuana for the first time. He was on his way to a concert when his sister produced a pipe with marijuana. A friend said, "You've never really smoked so at least try it."

He continued to smoke marijuana--"it screwed up my head for awhile." One day in the spring of his junior year he got "high" while lying in bed and became worried about his breathing. He always had been active in sports and had
"good breathing", so he decided to quit smoking cigarettes; but he continued smoking marijuana. He had no difficulty in abstaining from cigarettes. One friend continued to try to induce Richard to smoke and was amazed that he could abstain. Sometimes Richard would be tempted since he still associated with people who smoked. He had had short periods, during the four years he smoked, when he would decide to abstain for awhile--but it "only lasted a couple of weeks or so."

At this point in the interview Richard realized that he really had been a smoker for a few years but said he never really defined himself in that way. He never had a craving for cigarettes; rather he saw it more as a part of camaraderie. During the time he smoked he remembered thinking his cousin smoked too much.

Half of Richard's friends currently smoke. He finds other people's smoking very unpleasant.

It irritates my eyes and gives me headaches. Sometimes I can bear it--other times I can't. Also, I see it as people hurting themselves, so for society as a whole it is better if people don't smoke. If one less person smokes we, as a country, are that much better off, healthwise. I see a lot of negligence in people's attitudes toward their own health.

He thinks nonsmokers' rights outweigh smokers' rights but prefers voluntary compliance as he dislikes seeing more laws which are difficult to enforce.
Maggie is a 31-year old housewife with two children under two years of age. Maggie ceased smoking before she married her husband of three years; he never has smoked. Maggie smoked for about 15 years, averaging a pack of cigarettes a day at her peak.

She lived with her parents and older sister until her mother died, when she was in the eighth grade. Her father remarried when she was in the tenth grade, providing two older step-sisters and an older step-brother. When her father remarried the only sibling living at home was one step-sister who, although one year older, was in the same grade as Maggie.

Maggie's mother, father and step-mother all were non-smokers. Her grandfather, however, was a heavy smoker:

They said that when he had a stroke the only thing he could hold was a cigarette. I was young at the time and don't remember if they thought his smoking was related to the stroke.

Although Maggie's father didn't say much about smoking (or anything, for that matter) she definitely received the impression that he didn't want her to smoke. Her parents never did know that she smoked even though she smoked all through high school. Even after she went away to college and went home for holidays she would go outside to smoke:

I was afraid it would hurt my father if he knew. We had a good relationship and I thought he would be disappointed in me.
Maggie first started smoking in the eighth grade, on New Year's Eve. She did not say if this was before or after her mother died:

I was at a party and some of the kids were smoking. The big brother of one of the girls took me aside and gave me a puff of his cigarette. I almost died! God it was awful! I tried it because so many people were doing it— but if the older brother hadn't taken me aside I wouldn't have tried it. It was like he was going to teach me. And he was real neat.

After this experience she smoked occasionally—once a month at pajama parties. She never provided the cigarettes. Three or four girls were the instigators and most of them smoked in front of their parents so it seemed to Maggie to be "the thing to do."

Maggie's step-sister, who lived at home, also smoked; but they never smoked together because they were not close and never did anything together. She thinks her parents knew the sister smoked and probably told her she should quit but it was not a major issue.

Maggie's smoking increased to about two cigarettes a day when she started driving at 16 because she then had more places to smoke. She started buying her own cigarettes and carried them in a band-aid box to conceal them.

I never smoked at school because that was illegal. I wouldn't smoke at school dances either, because I was a school leader and didn't want to get in trouble. Smoking at school was a pretty serious crime.

Some of her friends were cheerleaders and student council representatives and about 90% of the girls smoked, but she
remembers only one boy who did. She dated this fellow in tenth grade and they smoked together, but the boys she later dated did not smoke. Nonetheless, she smoked when she was with them. Maggie said that there was not a more negative attitude about girls smoking than boys, but pointed out that she was in a group in which most of the girls smoked.

Maggie didn't define herself as a smoker until she was in college, but even then she didn't think she always would smoke. She always had a time when she would stop—after college, then after graduate school and then when she became pregnant.

As soon as she entered college her smoking increased to a pack a day. She could smoke in class and thought that was "neat." Almost everyone smoked in college as she recalled. From college on she smoked everywhere. After college she went to graduate school and then worked in Europe and the Middle East and always seemed to be surrounded by smokers.

When she returned to the United States and settled in Southern California her attitude about smoking began to change:

When I came back to the United States I found fewer people smoking. That's when I began to feel guilty about lighting up. I realized that most of the people who really had a lot on the ball weren't smoking anymore.

For the first several months that she was home she stayed with a friend who disliked smoking so she tried to limit her smoking. After that she made "half-assed attempts but never really big attempts to stop." She started dating her future
husband and, because he did not like smoking, limited her smoking around him.

In 1976 she worked in an office in which only one other person smoked. When he left she felt she alone was polluting the air. She stopped buying her own cigarettes and "bummed" them from a lady across the hall and then replaced them. That made it inconvenient to smoke so she reduced her cigarettes to four a day during the first week. It took about a month to abstain completely and a full year before she stopped having any desire to smoke. She worried about gaining weight but that did not occur.

Since she has ceased smoking she has become even more negative about cigarettes:

If I know a person it doesn't affect my opinion.
If I don't know a person and see them smoking then I don't want to get to know them and I think they are losers. It's a letdown if I see a fellow on the street and he's good-looking and then I see he smokes.

Her husband never says anything about smoking unless it is being blown in his face at a restaurant or ballgame which, evidently, happens frequently. Then he says how obnoxious it is. Maggie and her husband have few friends who smoke:

We keep our ashtrays in a drawer in the kitchen.
We allow people to smoke in the house but I can't remember the last time someone did--except my husband's father and one friend. They smoke less when they're at my house!

Maggie strongly supports the nonsmokers' rights movement. She is for laws that would provide for separate smoker and nonsmoker sections or eliminate smoking in shared
areas. However, she does not believe that there should be any restrictions on the cigarette industry.

She definitely would not want her daughters to smoke:

But there's nothing you can do. I would just tell them I didn't like it and will prohibit it in the house.

**Smoker Classification**

The case of Richard illustrates an important issue in the cigarette smoking literature. Richard would have appeared in the early literature as a nonsmoker or never smoker because he never defined himself as a smoker. Until questioned specifically about his history, he seemed to have forgotten that he had smoked fairly regularly. In more recent studies which include a greater variety of smoking categories, Richard might have appeared as an experimental smoker, occasional smoker, nonsmoker or ex-smoker, depending on how the category was defined or how detailed the questions. Several other respondents, as will be noted shortly, would have been equally difficult to classify. The problem arises not only because of self deception on the part of the subject but because to date, few studies have attempted to elicit an in-depth smoking history. The result is that except for the smoking extremes--"never smoker" and "regular smoker"--subjects are inconsistently and possibly erroneously classified. Consequently, this causes problems for researchers attempting to extract social, psychological and physiological factors related to becoming a smoker, maintaining smoking, or abstaining from smoking.
Of the 47 individuals interviewed, 15 (32%) would have been difficult to classify without a detailed smoking history. Of these 15, four would be problematic because their self-definitions were at odds with their actual smoking behavior, as in the case of Richard. Other examples were Bobby, Roy and Ralph.

Bobby, a 21-year old, third year college student initially reported that he was a nonsmoker and opposed to smoking. Asked if he ever had smoked he said "no, not really." As the interview progressed he reported that in eighth and tenth grades he would have puffs when with a group of people. In his senior year he once became upset and smoked a whole package of cigarettes in a few hours. In his third year of college he smoked every once in awhile around his ex-girlfriend "to get her to quit." Then for awhile he bought unusual brands of cigarettes; "Most of those were enjoyable--I got to like them for awhile but decided they were bad for me and quit." When he started smoking the different brands he also acquired a pipe and continues to smoke it two or three times a week. He is also a heavy marijuana smoker.

Roy, a 19-year old, third year college student also defined himself as a nonsmoker. He indicated he did not like smoking. Although he originally reported that he never purchased his own cigarettes and never inhaled, he had a rather lengthy smoking history beginning in the second grade. He had a cigarette "here and there" during second
and third grades. In the ninth grade he would smoke periodically while having long talks with his best friend. In twelfth grade Roy had two friends who smoked and for a three-month period, whenever they visited, he smoked their cigarettes. During the subsequent five months he worked in a store where cigarettes were sold and bought cigarettes there. He continued to smoke at home with company, or when drinking. After that, for a year and a half, he worked at a gas station and smoked at work on nights when it was cold.

Ralph, a self-employed 32-year old man initially defined himself as a nonsmoker. When asked if he ever had smoked he said "only socially, in junior high and high school." It later appeared that he also had smoked during his first, and possibly second, year of college. Although he never defined himself as a smoker he did buy his own cigarettes and did inhale. He also smoked little cigars in high school and college. His smoking usually occurred "when going to friends' houses, hanging out, after football games, after surfing and on surfing trips."

The cases of Richard, Bobby, Roy and Ralph illustrate how important it is, particularly when questioning people about their past smoking practices, to obtain a detailed history. It is impossible to know how Richard, Ralph and Roy would have described their smoking status if they had been interviewed during the period when they were smoking. It is important to note that Bobby, who was interviewed shortly after he ceased smoking cigarettes and while he was
smoking a pipe, asserted he never really had smoked. If these four people are at all typical it may be hypothesized that individuals who are, or who become, particularly negative about cigarette smoking, are likely to deny or minimize their smoking history. To increase the accuracy of smoking history reports, researchers would be wise to ask specific questions about the subject's past experience.

Research on cigarette smoking might also include questions on other types of smoking. When, as is usually the case, cigar and pipe smoking are not included in questions on smoking status, individuals who do smoke tobacco will be included as nonsmokers. Although there are differences between cigarette smoking and pipe and cigar smoking, assigning the latter to "nonsmoking" status is questionable. Studies on attitudes toward cigarette smoking also should include attitudes toward other forms of tobacco smoking. One cannot assume that a negative attitude toward cigarette smoking necessarily coincides with an anti-smoke or anti-smoking attitude. Different meanings and different emotional connotations may be attached to different types of smoke, as in the cases of Bobby, Karen and Keith.

Bobby, the 21-year old current pipe and heavy marijuana smoker, is bothered by cigarette smoke in a closed space such as a car. Yet at one point in the interview he said he almost always smoked his pipe when he went for a drive at night.
Karen is a 20-year old junior in college who lives with Bobby. She never has smoked a cigarette. She thinks cigarette smoking is "sickening." But Karen likes pipe smoke "because it doesn't linger and smells good." Both her father and her roommate, Bobby, smoke a pipe. She is a heavy marijuana smoker.

Ellen is a 19-year old college sophomore. She had one puff of a cigarette in the fourth grade and never tried it again. She "hates" cigarette smoking. "I've never smelled anything more disgusting--the smell, the ashes, the look--everything about it is gross." Although she is negative about cigarette smoking she is not negative about cigarette smokers. When Ellen was 18 she bought a pipe and for the last year has smoked a bowl of tobacco a month--usually on the bus going home or sitting in her room. Her father, whom she describes as "the best guy in the world", smokes a pipe once a year at Christmas.

Keith, a 47-year old school administrator defined himself as an ex-smoker who had "quit" when he was 21. He is not bothered by cigarette smoke. He does, infrequently, (every six months) have a cigarette and enjoys cigars on occasion, averaging one or two a month.

The preceding examples and case histories indicate the importance of obtaining detailed smoking histories to define smoking categories. Error variance in quantitative studies would, no doubt, be reduced if factors related to more
specific smoking habits were sought rather than factors related to general and frequently vague classifications.

In the recent research on cigarette smoking, the simplistic nonsmoker, smoker, and ex-smoker categories have been replaced by more specific categories. The most common classifications now used deal with types of smoking patterns such as never smoker, nonsmoker, experimental smoker, occasional smoker and regular smoker. Unfortunately, not all studies use these same categories and definitions vary from one study to the next (Office of Smoking & Health, 1979).

A second classification system utilizes measures of the amount smoked such as "light, moderate, heavy." The definitions of these categories also are not consistent and attempts rarely are made to determine how the amount smoked relates to the types of smokers cited above.

A third classification system has dealt with the needs satisfied by smoking. The categories derived by this research have tended to be more consistent as the researchers have attempted to integrate the categories derived from various questionnaire formats (Coan, 1973; Russell, Peto & Patel, 1974; Tomkins, 1966). Nonetheless, because of the variety of classifications used, (1) types of smokers, (2) amount of smoking and (3) needs satisfied by smoking, it has been difficult to determine when research studies are comparable. Unfortunately, this difficulty rarely has been discussed when comparisons of samples are made.
One of the few attempts to integrate the three classifications originally was undertaken by McKennell and Thomas in 1967 and elaborated upon by McKennell in 1973. Using cluster analysis McKennell (1973) classified a random sample of 2,000 British respondents into six distinct smoking types, based on amount smoked, needs met by smoking and smoking types. This classification is most useful for determining factors related to smoking in the maintenance and cessation stages.

The smoker classification system that emerged from the current research is explained below. This classification is based on the smoking pattern and the amount smoked. The classification does not distinguish between smokers based on the needs met by smoking (such as tension-reduction, stimulation) although some general category distinctions do exist and will be discussed.

The six categories are (1) never smokers, (2) experimental smokers, (3) short-term smokers, (4) intermittent smokers, (5) light smokers, and (6) constant smokers. (See Appendix D for subject profiles.)

**Never Smokers**

Never-smokers are those individuals such as Lance, (described in the case study) who had never had a puff of a cigarette or tobacco product. Nine of the 47 respondents were defined as never smokers. Eight of the respondents not only did not smoke cigarettes—they also had not smoked
other forms of tobacco. One of the respondents, Karen (discussed previously) never had tried tobacco but was a regular marijuana smoker. Since the focus of the classification system was tobacco smoking, Karen was included in this category.

**Experimental Smokers**

Experimental smokers are defined as those individuals who had had at least one cigarette but never had smoked every day. They never defined themselves as smokers and had smoked fewer than a carton of cigarettes. Ten of the 47 respondents were included in this category. Nine of the 10 had smoked between one and 30 cigarettes. One individual, Bobby, (discussed previously) had consumed around a carton of cigarettes over a period of time and was a current pipe and marijuana smoker. One individual, Ellen, (discussed previously) had tried cigarettes only once but was a monthly pipe smoker.

**Short-term Smokers**

Short-term smokers are defined as individuals who, at some point, had smoked every day for a period of time but had never defined themselves as smokers, never considered themselves addicted, or had ceased smoking by early adulthood. This group tended to be quite diverse in their smoking patterns and in their attitudes toward cigarettes. They were distinguished from experimental smokers by their longer or more consistent smoking histories and from the
long term smokers (intermittent, light and constant smokers) by their shorter histories and final cessations. These individuals were more likely to view their smoking as related to a certain image they wanted to convey. Eight of the 47 respondents were included in this category. Three of the eight never defined themselves as smokers, never considered themselves "hooked" and smoked less than a half-package of cigarettes a day at their peak. This group included Richard, whose case history was presented, and Roy and Ralph, who were discussed. The other five respondents in this category had at one point defined themselves as smokers. Three said they were addicted to cigarettes and two said they were not. Two of the eight have smoked cigarettes since they originally abstained. One of these, Keith, has smoked a cigar once a month and a few cigarettes a year for the last 25 years. The other has had several brief periods over the last 15 years when he smoked.

**Intermittent Smokers**

These smokers are defined as individuals who had a rather long smoking history, usually did not smoke every day, had frequent abstinence periods, and smoked less than a half-package of cigarettes a day when they did smoke. They did not define themselves as "real smokers" and primarily smoked in social situations. They differed from short-term smokers in their longer smoking history and from light smokers by smoking more sporadically. Three of the 47 respondents were classified in this category.
Light Smokers

These smokers are defined as individuals who usually smoked every day and smoked about a half-package of cigarettes a day. They differed from intermittent smokers in that light smokers defined themselves as smokers. They differed from constant smokers in that they tended to smoke fewer cigarettes a day and did not smoke in the morning. Four of the 47 respondents were classified as light smokers.

Constant Smokers

These smokers are defined as individuals who smoked a package or more of cigarettes every day for an extended period of time, considered themselves addicted, and smoked in the morning and all day. Thirteen of the respondents were included in this category. Eight of the 13 had abstained from cigarettes for periods of six weeks to five years but all returned to their previous smoking pattern. One respondent, Maggie, (see the case study) appears to have ceased smoking permanently. The term "constant" smoker was preferred to the more commonly used term "regular" smoker because this type of smoker was no more regular or consistent in his/her smoking pattern than the intermittent and light smokers. In other words, the intermittent smokers regularly smoked intermittently and the light smokers regularly smoked lightly.

It was debated whether or not to label these smokers moderate and heavy smokers as the individuals in this category smoked between one and four packages of cigarettes
a day. However, to refer to someone who smokes a pack a day as a "moderate" smoker seemed inappropriate. Thus, the term "constant" smoker was selected because these individuals smoked continually throughout their waking hours while the light smokers did not smoke in the morning. The heavy smokers (those who smoked over two packages a day) were not included in a separate category because their smoking pattern was the same as the individuals who smoked one or two packs a day.

A Note about Ex-smokers

When first contacted, 10 of the 47 respondents reported that they were ex-smokers. When the interviews were analyzed and the smoker categories developed it became evident that only one of the respondents, Maggie, had quit smoking after having been what is here defined as a "constant smoker." One of the self-defined ex-smokers was from the "light smoker" category. When her interview was updated in 1983 she had returned to smoking. Three of the ex-smokers were intermittent smokers. At the time of the interview one had abstained for one day; one had abstained for one month; and one had abstained from cigarettes for one year. Five of the ex-smokers were the five short-term smokers who had defined themselves as smokers during their relatively short smoking period.

In order to understand factors related to smoking cessation and abstinence, future research should attempt to
determine the previous smoking patterns of individuals labelled "ex-smokers." The classification system suggested here is one possibility. It should be apparent that a single ex-smoker category does not convey the complexities of cigarette abstinence.

**Summary**

The utility of obtaining in-depth smoking histories in addition to information pertaining to current smoking patterns should be evident. Individual smoking patterns and histories may be at variance with self-definitions of smoker type (e.g., occasional, experimental, etc.) even when attempts are made to define the categories by providing choices as to the amount smoked in the last week, month or year.

A more complete and accurate categorization of smoker types is possible when historical data is included. Factor analysis and cluster analysis could be utilized to refine the categories suggested here, based on detailed information about amount smoked, needs satisfied, and smoking pattern. With the inclusion of the smoking history as a determinant of smoker categorization, factors related to differential initiation and transition stages may be more readily identified, thus allowing for more effective prevention or intervention programs aimed at different groups.
CHAPTER IV

SMOKING INITIATION

Smoking initiation by teenagers has been the focus of considerable research. A number of personality dimensions have been found to be associated with initiation in at least one study; however, Smith (1970), in a review of personality and smoking studies, found consistent support for only four. In general, personality dimensions have not been useful in accounting for sizeable amounts of variance in the instigation and maintenance of smoking (Office of Smoking & Health, 1979), leading Williams (1971) to conclude:

Thus, both the empirical results of previous studies and discussions of the state of the art of research into personality correlates suggest that personality will not provide the most fruitful approach to understanding why children do or do not take up cigarette smoking. (p. 15)

Family and peer smoking practices have been the psychosocial variables most frequently found to be associated with smoking initiation (Office of Smoking & Health, 1979). Peer pressure and parental modeling and identification have been cited as the means by which these factors exert their influence (Allegrante, O'Rourke & Tuncalp, 1977-78; Evans, 1976; Williams, 1971). The precise operation of these influences, however, has not been demonstrated.

The prevalence of smoking among females has increased slightly, resulting in a convergence of smoking rates for
males and females. In 1955 the percentage of current male smokers over 18 was 52.6%; for females it was 24.5% (Office of Smoking & Health, 1981). In 1980 the percentage of current male smokers over 17 was 36.7%; for females it was 28.9% (National Center for Health Statistics, 1981). In the interim the smoking rates for males continually declined; for females the rates increased to 33.7% in 1966 and then declined gradually to the present rate (Office of Smoking & Health, 1981).

In the 1950s males were not only more likely to smoke but were more likely to initiate smoking at a younger age than females. By 1974 these differences had disappeared (Office of Smoking & Health, 1979). A number of researchers have attributed the overall reduction in smoking rates since the 1960s to the growing public awareness of the health hazards of smoking (Horn, 1979; Office of Smoking & Health, 1979), coinciding with an emerging antismoking movement (Markle & Troyer, 1979; Nuehring & Markle, 1974). The convergence in the incidence of smoking for males and females has been attributed to the general convergence in sex roles (Dickens, 1978; Matarazzo & Saslow, 1960; Reeder, 1977).

This chapter focuses on the factors that the respondents' interview data suggests are relevant to smoking initiation. The respondents' perceptions of the roles of cultural factors, peer and parental influences, and personal motivations in smoking initiation will be discussed.
In addition, the non-smokers' perceptions of the factors that prevented them from experimenting with cigarettes will be presented.

Preconditions - Setting the Stage for Smoking

Societal Attitudes and Sex Roles

One of the factors that affects cigarette smoking is the societal acceptance of the behavior (Leventhal & Cleary, 1980). Over the years attitudes toward smoking have changed, as evidenced by the growing number of nonsmokers' rights groups and local ordinances limiting public smoking. However, while cigarette smoking has become less acceptable in general, an emerging societal belief in equality for the sexes has operated to reduce, if not eradicate, the selective social sanctions against smoking by females (Bossé & Rose, 1976; Dicken, 1978).

Attitudes in the 1940s. The individuals in this study ranged in age from 18 to 48 and thus reflected the attitudes toward smoking over a 30 year period. The older subjects were in high school and college (the most likely period for smoking initiation) before the severe health risks of smoking were widely known. They grew up in a climate where cigarette smoking generally was accepted (Horn, 1979). However, they also grew up in an age in which male smoking was the norm and female smoking was discouraged (Clausen, 1968). The four respondents who were in high school in the 1940s describe how smoking was perceived at that time:
(Mae-48) When I was growing up my mother didn't smoke, nor did any of my female relatives. They strongly felt that girls shouldn't smoke. I didn't have any girlfriends who smoked. My attitude was that males smoked and females didn't.

(Raymond-48) Smoking was pretty much accepted as part of the times. It was part of the rite of passage for boys. It seemed like all the boys smoked.

(Keith-47) I can think of two girls who smoked in high school and they had a bad reputation. It was pretty much the case that men smoked and women didn't. I heard later that girls were smoking more at "hen parties" rather than out in the open. Cigarette smoking for males was the smart thing to do. The guy who didn't smoke stood out. They didn't make comments but there was a feeling that it was easier to be accepted if you smoked.

(Jay-45) I didn't enjoy smoking then. It just seemed like the thing to do. The girls weren't smoking except for the loose types.

Smoking appeared to be more closely tied to masculinity during that period (Seltzer, 1959). The older males noted the connection between the two:

(Keith) I never practiced my smoking style but was conscious of trying to project a masculine image. But I never felt quite comfortable about the way I did it. I never felt I looked cool and nonchalant.

(Raymond) I practiced my smoking style because I had to do it the masculine way.

The pressures to establish their masculinity were greatest for these men during their adolescence. This period generally has been considered by psychologists as a time when identity crises are most acute (Atkinson, Atkinson & Hilgard, 1983). After adolescence the men reported that they felt less need to smoke as a way of projecting a
masculine image. Also, they became more accepting of smoking by females. That acceptance of female smoking coincided with a weakened link between smoking and masculinity is understandable. Female smoking was not a threat to masculinity when smoking no longer was a way of projecting masculinity.

Attitudes in the 1950s and early 1960s. Although the image potential of smoking faded with maturity for males, the perceived benefits of smoking for young males and negative sanctions for young female smokers persisted into the 1950s and 1960s:

(David-35) I identified smoking as a masculine thing....In explorer scouts (age 14) we could smoke in front of the scout leaders and they wouldn't tell our parents. They saw it as part of going from boyhood to manhood.

Female smoking wasn't relevant then--it wasn't legitimate. Even later it was okay for me but I had second thoughts about it for a girlfriend. In eighth grade through the end of high school I had a girlfriend who smoked when I did. She was my bottom line girlfriend--always available.

(Ralph-32) Males had to do it to fit in with certain people.

(Havana-27) In my high school yearbook I'm quoted as saying "I dislike students with no school spirit and girls who smoke."

(Tim-27) In high school all the guys smoked and the not-so-nice girls.

That the stereotypes about female smokers in high school persisted into the 1950s and 1960s also was acknowledged by the women interviewed. For some of the women such as Denise, Sally and Joan, the stereotypes prevented them
from experimenting with cigarettes until after they graduated from high school.

(Denise-43) I may have had a slight tendency to believe that a girl who smoked would do anything.

(Sally-38) The bad girls smoked in high school—the tough ones. If the girls smoked they probably did other things.

(Joan-28) In high school it was considered low class to smoke—and more so for girls. For boys it was more acceptable. Loose women smoked.

One of the women who did smoke in high school tended to be selective about where she smoked:

(Jane-38) I thought it looked cheap to smoke in the same places as the cheap girls who smoked—at school or at dances.

Only Cathy, who was in a group of girls who defined smoking as "cool," smoked more openly in high school:

(Cathy-34) My friends and I were considered wild but none of us was promiscuous. We just smoked. The teacher's pet types didn't smoke. I wasn't going to college and had no aspirations to get good grades and wanted to have fun.

Attitudes in the mid-1960s and 1970s. As public awareness of the health hazards of smoking increased and sex role distinctions decreased, the attitude toward high school smokers appeared to have changed. The respondents who were in high school during this period did not report that smoking was an integral part of the masculine role and female smokers were not apt to be viewed more negatively than male smokers. They reported that, although cigarette smoking still was much in evidence, it was likely to be
viewed negatively by some teenagers. Some of the respondents became outspoken critics of cigarette smoking.

Teenage marijuana smoking was mentioned for the first time:

(Paula-25) It was mainly the freaky people who smoked cigarettes--the ones who would be into dope. They were more into dope than cigarettes. There wasn't any different attitude toward girls and boys smoking.

(Travis-24) Quite a few of my closest friends in high school smoked and I didn't particularly care. If they wanted to smoke it was their problem but I didn't want it near me. There was no different attitude about girls smoking.

(Drake-24) During high school about half of my friends smoked cigarettes--half of the girls, too. In the last few years most of my friends smoked dope. Dope smoking was about the same as cigarette smoking.

(Karen-20) The other kids hassled me because of my anti-smoking attitude. Boys would smoke more marijuana--girls would smoke more cigarettes.

The changing attitude toward cigarette smoking for females no doubt explains why, by 1974, adolescent boys and girls were smoking in the same proportion (National Institutes of Health, 1976). McKennell and Thomas (1967) note that "It appears to be the legacy of past social taboos which operate to prevent more older women from smoking" (p. 2). Mirroring this notion Bossé and Rose (1976) view the convergence between the sexes in frequency of smoking as a result of a shift to sex-equalitarian values. The interview data from this research support this explanation.
Factors Preventing Smoking

As the sex role issue illustrates, the factors preventing cigarette smoking may be of equal or greater interest than the factors causing cigarette smoking (Clausen, 1968). Since concerted efforts are being made to develop programs to prevent smoking, the existing limiting factors are an important, though overlooked, area of study. For women, risking being defined as a "loose woman" or "unfeminine" effectively deterred many women from experimenting with cigarettes. If the negative sanctions persisted through the critical period for smoking initiation (ages 12-20) they served to prevent smoking.

Aversion to cigarettes. Some of the respondents developed strong anti-smoking attitudes when they were young. A number of factors may have served as the impetus for these attitudes. Although parental smoking was sometimes the focus of a respondent's aversion to cigarettes, parental objection to smoking generally was ineffective in developing anti-smoking attitudes. The respondents, smokers and nonsmokers alike, indicated that their parents did not want them to smoke, although the extent of their objections varied as did the tactics employed. Some parents emphasized the expense of smoking, others stressed the health hazards or threatened severe discipline, and some offered money rewards for not smoking. There seemed to be no tactic that was more effective than another. One parent forced smoking in an attempt to prevent future smoking:
Neither of my parents smoked then. I started asking questions about smoking when I was 12 or 13. My father got a Camel from a friend and made me smoke the whole thing and I got sick. That ended my questions on smoking for six years. (Belle took up smoking in college.)

As illustrated in the case study of Brian, even being forced to eat cigarettes was not guaranteed to deter cigarette smoking.

The smoking status of the parents has been associated with the children's smoking status (National Institutes of Health, 1976) although, according to Jones, Shainberg and Byer (1970) parents' smoking status may influence the age at which children take up smoking more than it influences whether the child will become a smoker.

Most of the individuals in the sample had someone in their immediate family who smoked some tobacco product. Thirty-three of the respondents grew up in families where at least one parent smoked although, in seven of these families, the smoking parent or parents had stopped by the time the respondent was thirteen or fourteen years old. In addition, in thirteen of these thirty-three families the respondent had an older sibling who smoked. In six of the remaining forty-seven families the father smoked cigars and/or a pipe. In all six families an older sibling smoked cigarettes. In four of the forty-seven families the parents did not smoke but an older sibling smoked. In the four remaining families neither the parents nor an older sibling smoked. Not all of the smokers came from the smoking
families. For example, the four families in which neither a parent nor an older sibling smoked any tobacco product produced two constant smokers and two experimental smokers.

For some of the never smokers a parent's smoking seemed to be the focus of their aversion to cigarettes, an aversion that developed when they were young.

(Travis-24) Both my parents smoked and I would constantly yell at both of them about it. I was very against smoking from when I was very young so my parents didn't need to discourage me from smoking. I can't stand the smell. In high school a few of my closest friends smoked and it bothered me in high concentrations so I would always have to sit upwind of them.

(Lester-33) My mother and grandmother smoked and it always physically bothered me--it hurt my eyes and nose. It started bothering me at age five or six. I also thought it was stupid. My mother didn't smoke much around me because I would get irritated and angry at her smoking in my presence. I got so I refused to go in the car on trips. Finally she was forced, by my father and us kids, to go underground and would sometimes sneak outside and have one.

Lance, whose case study was presented, also developed a similar aversion although the focus was on cigarette butts and ashes rather than smoke.

For Marian, a combination of factors led her to abstain from smoking:

(Marian-20) My mother smokes. She doesn't want to quit--she just doesn't want me to start. She says she's going to die from something so it might as well be cigarettes. She's very nervous and says smoking calms her down and if she didn't smoke she'd have to go on tranquilizers. Mom had a nervous breakdown when I was a teenager. The main reason I don't smoke is because Mother didn't want me to. I learned from her that it's a disgusting habit and I've been adamant against it since I was very young.
When I was 16 I knew a woman, a heavy smoker, who had a lung removed. I felt that here my mother had two good lungs and she was smoking. My dislike of my mother's smoking has to do with my concern for her.

I was always aware of the health hazards. I can remember doing a report on smoking and cancer in the sixth grade and I got all sorts of information on it.

One of the nonsmokers, Karen, believed her experience with smokers in high school was the source of her negative feelings about smoking, although she already had developed symptoms from cigarette smoke:

(Karen-20) When I went to public high school I was just out of Catholic school and I was innocent and naive. We had a real problem with smoking at the public school. There were less than one hundred students and 75% smoked. I used to put up "no smoking" signs in the bathroom. The smoke was all around and I would inhale it and my eyes would get all red so I talked to the principal and he told me to put up signs. I got beaten up for it. My attitude was very negative toward smokers. They were beating me up. They weren't good students. My negative attitude came from these people.

Parental versus peer attachment. A stronger attachment or identification by the teenager to parents, as opposed to peers, appears to be another factor preventing smoking. As children mature they gradually begin to shift their attachment away from their parents and toward their peers (Middlebrook, 1974). Although most children do not completely sever their identification with their parents, some do. On the other hand, some children continue to identify solely with their parents (Bower, 1979). Since peers are more likely than parents to approve of cigarette smoking
for teenagers (Clausen, 1968; Williams, 1971), those who are more oriented toward their peers should be more inclined to smoke. Although no direct measure of parent versus peer attachment was obtained, indirect evidence suggests that identification with parents prevented some of the women in the sample from smoking, as evidenced in the following statements:

(Sylvia-36) I tried it once or twice in high school and college but I checked out of that peer stuff at an early age. None of my friends smoked and I tended to do a lot of things with my family.

(Judy-31) It was against the rules to smoke and adults told you not to, so most of the goody-goodies, like myself, didn't. In high school I was a pleaser. I liked to please my father and my teachers.

(Sandra-25) I was pretty much of a wallflower in high school. I had one close friend but was a loner--really shy and the other kids had all been together for years before. I spent more time with my family. None of my close friends smoked and I sort of thought that people who smoked were pretty dumb.

(Lisa-19) In high school I kept to myself. I had one friend and she didn't smoke. I couldn't date until I was 16. I was shy until I met my boyfriend in the second half of my senior year. The smokers were the tough kids. I was afraid of them. I wouldn't go in the bathrooms when they were there.

(Janelle-21) I was basically a loner in high school. None of my close friends smoked. I always thought smoking was bad. I was shocked at anyone who would smoke. Smoking, drinking and wearing make-up were all associated with being grown up and I wasn't supposed to be. My older sister smoked but she didn't smoke in front of me--she wouldn't! None of my closest friends smoked. I had one male friend who smoked but I never saw him
smoking. He smoked pot and was hanging out with the "freaks." He was the only person I ever knew who did any of those things I wasn't supposed to do.

In the National Cancer Institute study (1976) of smoking among teenagers and young women, two types of nonsmokers were found. One type, which accounted for 55% of the non-smokers, was women who were not influenced by new values, were traditional in their views, and shied away from peers who smoked cigarettes and used marijuana. They also tended to respect authority and to be strongly religious. The other type, referred to as "vulnerables," accounted for 45% of the nonsmokers. They shared many of the values of the smokers and were highly exposed to smoking environments. Their reason for not smoking emphasized physical fitness, concern about addiction to cigarettes, and a desire to control their own lives. This group tended to become militant anti-smokers.

This classification, in a general sense, distinguished the nonsmoker women in this research. One group of women developed an early aversion to cigarettes, or indicated a strong concern about the health hazards of smoking. The nonsmoker males evidenced similar aversions or concerns. The second group of women tended to be more oriented to their parents than their peers and/or tended to be shy as teenagers and/or more traditional in their values. Although this group did appear to be less militant anti-smokers in their teens, it did not appear that this difference continued into adulthood.
Salience of health concerns. It was clear that awareness of the health hazards associated with smoking was a factor in preventing some of the nonsmokers from experimenting with cigarettes. The individuals who eventually became smokers also were aware of the hazards although the issue was less salient to the older smokers who began smoking when less was known about the effects. When asked if they were aware of the health risks before they began smoking, some of the smokers responded:

(Karla-18) I was aware but thought it would never happen to me. I didn't think I'd always smoke.

(Sarah-21) I was aware of the health hazards but didn't care--I wasn't looking to the future.

(Joan-28) I always assumed I'd quit if it became a hazard to me.

(John-25) We got the health stuff in school but at the time I didn't believe it.

(Tim-27) I was very well aware of the health hazards and believed them by age 13. At 14 and 15 I doubted it--doubted everything.

(Ted-32) I was aware of the health hazards but it wasn't as strong a link as now. The effects were minimized by the public.

(Brian-33) I didn't feel the dangers had to do with me.

(Jay-45) I knew it would make you short of breath but didn't worry about it.

(Betty-27) I didn't pay any attention to the health hazards. I was aware of them but knew I was immortal. I don't think about anything bad happening.
(Bess-33) I saw a film so must have known about the health hazards. But I wasn't aware in the same sense as now.

All but two of these individuals either have ceased smoking or now report being concerned about the health hazards and wish they weren't smokers.

Recent evidence confirms that smokers and nonsmokers alike believe that smoking is potentially dangerous to health (Fishbein, 1977). The awareness may (in combination with other factors) prevent some people from smoking. It should not be surprising that this knowledge alone does not deter a number of young people from smoking. For many, the future hazards are less salient than whatever they perceive as the immediate rewards of smoking. This present orientation and minimization of hazards is reflected in a variety of youthful and adult behaviors. For example, the dangers of drinking and driving have been well-documented. Nonetheless a large number of people readily visit bars and attend dinner parties where they consume more alcohol than is legally permissible for driving. Most of these people believe that drinking and driving is dangerous but that they are "careful" when they do it. Also, youths and adults drive faster than the legal limit—again a documented hazard—yet believe they are in control. There are, no doubt, numerous other examples. The point is that we should not be surprised at the lack of foresight on the part of smokers as they are not alone in minimizing the risks of their behavior. This is not to say that the hazards should
not continue to be stressed. It is, rather, that we should not assume that this tactic alone will discourage most people, young or old (Evans, Rozelle, Mittelmark, Hansen, Bane & Havis, 1978; Fishbein, 1977; National Institutes of Health, 1976).

A number of factors appear to reduce the likelihood that an individual will begin to experiment with cigarettes. The factors that prevented cigarette smoking by the individuals in the sample were, singly or in combination:

1. (For females) Negative stereotypes about female smokers
2. (For females) Traditional values
3. Greater parental than peer attachment
4. Shyness--resulting in isolation from peers
5. Physical symptoms from cigarette smoke
6. Developed aversion to cigarette smoke, butts or ashes
7. Direct observation of negative health effects from smoking
8. Behavior commitment not to smoke, through researching an anti-smoking report
9. Negative experiences with, or negative labels attached to, smokers
10. Development of an attitude that prizes health

For the most part, those individuals who took up smoking were not constrained by these factors, or the factors became less salient as they grew up. A few of the respondents illustrated that a negative attitude toward smoking changed after high school.
(Havana-27) My parents didn't talk about smoking much. I was the one against it. I was a jock in high school and said I would never smoke or drink. (Havana, now a smoker, started smoking his first day in college.)

(Ted-32) My brother started smoking about three years before I did and I thought he was dumb to do it. (Ted, now a smoker, started smoking when he was a junior in college.)

It is interesting to note that both Havana and Ted did not have a parent who smoked. The four individuals previously discussed (Travis, Lester, Lance and Marian), who also were opposed to smoking when they were young, did have a parent who smoked. These four never smoked; Havana and Ted became constant smokers.

It is possible that exposure to parents who smoke may, in some cases, lead to stronger anti-smoking attitudes. Meyer, Friedman and Lazarsfeld (1973) found that "most children of smoking parents at some point 'bug' their parents to stop smoking" (p. 250). This behavioral commitment may enable them to more firmly establish anti-smoking attitudes and intentions than is possible for children whose parents do not smoke. The four never smokers did report that they had "bugged" their parents to stop smoking.

In a recent study (Sherman, Presson, Chassin, Bensenberg, Corty & Olshavsky, 1982) the researchers examined the relationship between direct experience with smoking and behavioral intentions to smoke. They found that behavioral intentions were the best predictor of adolescent smoking. The authors concluded:
The present findings suggest that messages aimed at attitudes toward smoking should be more effective in changing the smoking intentions and subsequent smoking behavior of nonsmoking adolescents who have had a high level of direct experience with smoking. Paradoxically, it should be easier to change the attitudes of low-direct-experience nonsmokers because these attitudes are not held with confidence. Unfortunately, however, such changes in attitude will not have as much impact on changing their smoking intentions and behavior because of the relatively weak relationship between attitudes and behavioral intentions for low-direct-experience nonsmokers. (p. 382)

Thus, having parents who smoke may, in some cases reduce the likelihood of smoking for teenagers. This is, however, dependent upon the individuals' having developed negative attitudes toward their parents' smoking. Meyer et al. (1973) found that the students who "bugged" their smoking parents to stop smoking were less likely to smoke themselves than those who did not. Unfortunately there is, at present, little understanding of why some children find their parents' smoking aversive and some do not.

Factors Related to Initial Experimentation

Individuals who had not been discouraged from smoking for the reasons cited in the preceding section were likely to experiment with cigarettes. Thirty-eight of the respondents had tried cigarettes on at least one occasion. Fourteen of these experimented once or twice when they were in grammar school but only three continued to experiment immediately after this trial and two never experimented with cigarettes again.
The factors most commonly cited as influencing smoking initiation are peer pressure, imitation of significant adults, rebellion against parental authority, curiosity, and media stereotypes (Office of Smoking & Health, 1979). Most of these factors, either singly or in combination, did appear to be related to smoking initiation for the interview respondents. The relationship, however, tended to be complex. The relative importance of each factor appeared to change over the years as cigarette smoking became less culturally acceptable.

The data also suggest that different combinations of factors generally may be related to smoking initiation for short and long term smokers.

**Peer Influence**

Peer pressure is a psychological force operating on a person to fulfill others' expectations (Bower, 1979). The term is used in the literature on cigarette smoking to express the observation that individuals are likely to conform to the smoking behavior of their peers. Peer pressure is sometimes an explicit attempt to force an individual to engage in some form of behavior, but not always. The pressure can be implicit in that a peer or peer group expects the person to act in a certain way, although all that is necessary is that the individual believe certain behavior is expected. If the individual engages in the behavior, he or she may do so without privately accepting the other's values. Kiesler and Kiesler (1969), in
discussing group pressure, refer to this type of acquiescence as compliance. If the individual not only complies but also accepts the other's values, it is referred to as conformity.

Numerous individual motives may account for a person's compliance or conformity. One particularly powerful motivation is a desire to be accepted, or at least not rejected, by one's peers (Kelley, 1952). Whether the motivation results in initial compliance or conformity may not determine whether or not the behavior is maintained if the individual changes peer groups. As noted by Allport (1937), behavior performed over a period of time tends to acquire motivating characteristics of its own.

Compliance and conformity, as defined by the Kieslers, refer to a change in behavior or belief toward the group that occurs through real or imagined group pressure. Hollander and Willis (1967) discuss another type of apparent conformity that occurs without the individual changing his or her beliefs or behavior. Hollander and Willis refer to this as "congruence conformity" which occurs when shared beliefs developed independently cause people to associate; it is not the result of peer pressure. Thus, the observation of a correlation between peers' smoking behavior does not necessarily imply the operation of peer pressure, nor does it invariably indicate compliance or conformity on the part of one or more of the individuals.
In cases where peers do influence the behavior, the effort or strain on the individual should be examined. In a number of circumstances an individual may believe it is necessary to adopt a particular behavior because of the view of peers. The behavior may be more or less compatible with the individual's values. If the behavior is not important to the person, he or she may comply without feeling any strain. Peer influence in this situation may be of only ancillary interest. The degree of peer pressure, the motivation of the individual, and the degree of strain involved in acquiescence, all need to be considered. In other words, only with information about the whole context of behavior can we draw conclusions about the operation of peer pressure.

In spite of the fact that the term "peer pressure" has been formally used to imply implicit as well as explicit pressure, the image conveyed by the use of the term in the smoking literature is frequently that of friends or acquaintances actively pressuring a person to smoke. This image does not reflect the dynamics of peer influence that researchers intend (Mettlin, 1976; Office of Smoking & Health, 1979). The lack of clarity as to the operation of peer pressure on cigarette smoking was noted in the Surgeon General's 1979 report on smoking and health:

Peer pressure is widely assumed to be a significant causal factor in the initiation of smoking. The strong influence of peer pressure is generally evident in young adolescents. . .but the precise relationship of such peer pressure to the initiation of smoking is more difficult to establish. (Office of Smoking & Health, p. 17-14)
Because of the erroneous image often conveyed by the use of the term "peer pressure," the term "peer influence" will be used when referring to peer activities other than explicit attempts to coerce an individual into smoking.

**Congruence conformity.** The peer influences on cigarette smoking that operated for the older respondents were in some ways dissimilar to the peer influences on the younger respondents. As noted earlier, the respondents who were teenagers in the 1940s grew up in a time when the health issue was not as prominent as it now has become. Although smoking was discouraged for youngsters, the cultural acceptance of the behavior resulted in greater tolerance of youthful smoking—at least for boys—than was evident in later years. Thus, peer influences on smoking appeared to be relatively less important. There is little value in examining peer influences on a behavior that is normative. During the 1940s and even into the 1950s there was abundant evidence of the acceptability of smoking. It was not uncommon for cigarettes (often in attractive boxes) to be available on the coffee tables in many homes. Hospitals—particularly military hospitals—distributed free cigarettes to patients. When someone started to smoke a cigarette it was considered polite to offer one to others present.

Smoking initiation under these conditions may have been more congruence conformity than the result of peer
influence. This appeared to be true for teenage boys and adult women. For males it was considered a normative and masculine behavior; for adult women it was considered—depending on social class—a polite behavior or a sign of sophistication.

When a behavior generally is accepted in the culture, there need be little internal struggle over initiating the behavior. Psychologists have noted that the commitment to a group is greater if the individual has to endure a more difficult initiation (Gerard & Mathewson, 1966). In the same vein, when one risks negative sanctions for engaging in a behavior, he or she is more likely to be committed to the behavior (Meyer, Friedman & Lazarsfeld, 1973). If, on the other hand, the behavior generally is accepted, it may be engaged in almost automatically with little thought as to its relative advantages or disadvantages. In this case less commitment to the behavior should be evidenced. Following this reasoning, those individuals who initiated smoking in an acquiescent environment should be less committed to smoking and thus more likely to cease smoking when the environment changes.

Two of the males over 40 years old in the sample illustrated this phenomena. Both Keith and Raymond (short-term smokers) felt they started smoking because it was expected of males. Neither particularly liked smoking, and both stopped when they perceived that smoking no longer was
necessary to maintain an image. Both had, for at least a year, smoked a pack of cigarettes a day. The other male respondent, Jay, who was over 40, began smoking for essentially the same reasons but became a constant smoker. The only discernable difference between Jay and the other two men was that Jay began to enjoy smoking about a year after he started. He now smokes two to two-and-a-half packs a day.

One of the women over 40 in the sample began smoking in college—initially to be polite when dormitory acquaintances offered cigarettes. Soon she began smoking to reduce tension while studying and continued smoking more alone than in the company of others. She continues to be a constant smoker.

As the cultural acceptance of smoking waned, the attitudes of one's immediate peer group played a greater role in influencing the behavior. Although it was not clear how some groups came to define smoking as "cool" when others did not, it was evident that some individuals adopted the behavior because of their peers' definition.

In some cases the motivation for the behavior was short-lived or sporadic. These usually involved a peer group's desire to project an image. The public aspect of the behavior seemed to be more important than any shared group value of smoking per se. When the image no longer needed to be maintained and no other value for the behavior
replaced it, the smoking was discontinued.

(Nora-20) For about two months in the ninth grade some friends and I would hang out at a recreation center. I had a few friends who smoked a lot and everyone was trying to pick up guys and look tough. Cigarette smoking was a way of looking tough. There were a lot of cliques in ninth grade and the most important ones looked tough. The cliques split up in high school (10th-12th grade). (Experimental smoker.)

Acceptance by a new peer group. In some cases the individual's primary motive for taking up smoking appeared to be related to trying to fit in with a new group. Bergin and Wake (1974) found that teenage smoking was initiated by changes in living habits such as changes in residence, absence of a parent, or matriculation in a university.

(Sarah-21) I started smoking when I first got into junior high. Four other girls and I were in one of the girl's room and one of the girls who was a regular smoker said "It's not going to hurt you--your parents do it." So I tried it. The next day I went out and bought a pack. It was the cool thing to do. I was making new friends and gaining a little independence. A lot of kids in junior high were smoking. I thought the toughies were smoking and I wanted to be a toughie. For the first year I only smoked at school or at a friend's house with other people.

(John-25) In the summer before ninth grade I started smoking. We had recently moved to a new town and before this I had been shy and reserved and a loner, and part of the teacher's pet group. When we moved I was always joining in. Everyone else had just started smoking so once when we were at a roller rink they asked if I wanted to try it and I did. After that every time I turned around someone was giving me a cigarette. It was an "in" thing to do. All the smokers banded together. Later it became a prestige thing because you would stand on a corner and people at school would see you and be shocked.
(Havana-27) It was the first day of college, in the dorm. All of us were in the front suite watching the girls across the street. A lot of guys were smoking and it bothered me so I thought I'd fix these guys. So I went to the store and bought the biggest cigar I could find. I didn't like the smoke at the time and was going to blast them. I'd just met these guys and they started calling me "Havana"--that's how I got my nickname. I was a crazy kind of guy--an attention getter. If you said "Havana" all the students knew who I was. I thought the cigar was kind of good so I smoked them regularly. When I went home for Christmas break a girl had some cigarettes so I started smoking hers because girls usually don't like cigar smoke. The next semester I joined a fraternity and a lot of my close friends in the fraternity smoked. There was a lot of "butt borrowing."

An initially simple motive for smoking can burgeon. Once the behavior has begun, a number of perceived benefits can result. The capability of cigarette smoking to provide a means of "fitting in," an easy route to a desired identity, as well as a means of dealing with personal tensions can combine and displace the original motive. The more situations and affective states that come to serve as cues for smoking, the more cigarettes consumed. As will be discussed in the next chapter, increased cigarette consumption is associated with self definition as a smoker as well as perceived physiological and/or psychological dependence on cigarettes. Once this occurs the behavior is likely to persist for some time.

Relevance of the number of peers smoking. Several studies have attempted to examine the relationship between the number of peers smoking and smoking initiation. Bynner
(1979) found that the number of friends who smoked was the most important variable in explaining smoking behavior in English and Welsh schoolboys. In another study (Matthews, 1974) the influence of peers appeared to stem from "best friend" relationships rather than from large or diversified group pressure. No doubt both types of peer influence operate. One's best friend's smoking status may be more influential than the number of peers smoking in smoking initiation for girls, as girls are more likely to associate in small groups than boys (Maccoby & Jacklin, 1974).

(Jane-38) My girlfriend and I started smoking together when we were 16. I smoked about a pack a week--one driving to school and one in the room at night while reading and one or two if my girlfriend spent the night. We would smoke in public if we went to a restaurant because we thought that looked grown up. We would also smoke at the beach, but we never smoked with other friends....We didn't smoke where the cheap girls smoked....But to us our smoking was grown-up. We practiced how we smoked and how we looked when we smoked.

(Joyce-37) When I was 18 I did it on a dare. I was at my girlfriend's house and she and her sister were already smoking. Initially I smoked at this girlfriend's house and then with a couple of girlfriends from school. I usually sponged cigarettes off of Fay at first. Smoking was a cool thing to do--a symbol of your independence....In high school I wasn't a crowd person. I usually had three or four close girlfriends.

For one girl, Nina (22) sporadic but repeated exposure over a five-year period to a girlfriend who smoked led to regular smoking. The girlfriend, Mary, lived with Nina's family during Nina's sophomore year of high school. Nina
took puffs from Mary's cigarettes. Mary returned for a visit during Nina's junior year of high school and Nina again smoked Mary's cigarettes. Nina didn't smoke during her senior year as Mary did not visit that year. In the summer after her senior year she went to visit Mary and smoked with her when they went out at night. In her first year of college she only smoked every few months. In the summer before her second year of college, Mary again came to visit and Nina smoked more. After that she started smoking on a regular basis, although none of her close friends smoked.

In other situations the number of peers smoking was a more relevant factor. In the following examples the individuals did not adopt the behavior to fit in with a new group. Rather, the individual's established peer group had come to define smoking as "fun" and "cool." The individual was likely to continue smoking in this situation only if s/he had no particular objection or aversion to smoking; in other words, little strain was involved in joining in with their smoking friends. Maggie, whose case study was presented, was one example; Cathy was another:

(Cathy-35) The group defined smoking as "cool" but it wasn't peer pressure. I don't remember any of them trying to get others to smoke. Some smoked and some didn't.

The ways in which peer influence operated in the respondents' smoking initiation were many. Although a few mentioned direct peer pressure as a factor in their first
smoking experience, they did not see it as operating after the first trial. The conformity appeared to be motivated by one or more of the following:

1. Shared images about the values of smoking:
   a. culturally defined (i.e., masculine, polite/social/camaraderie
   b. peer group defined (i.e., "cool," "tough")

2. Desire to be identified with a particular group

3. Desire to fit in with a new peer group

4. The perceived number of friends who smoked

5. The shared attributions made by friends in a best-friend relationship (unaffected by smoking behavior of the other peers)

In all of these situations, peer influence was only effective if the individual had not previously developed strong anti-smoking attitudes.

The generality of conformity. Discussions of peer influence and conformity should focus on the specific type of peer influence as well as the generality of the conformity. Without such specifics, readers may be led to believe that all types of peer influence are peer "pressure" and that conformity is the result of a conformist personality.

As has been illustrated, peer influence comes in a variety of forms. Conformity to peer influences on cigarette smoking may occur because, to a large extent, the individual has few objections to the behavior in the first place. As several respondents illustrated, conforming to a smoking peer group did not necessarily mean they would conform to other behaviors:
individual motives

for a few of the individuals in the sample, peer influence played a minor role in their smoking initiation. these individuals tended to begin smoking alone and most continued to smoke alone for a substantial amount of time. these respondents, also, were most likely to become long term smokers.

Observational learning. A number of factors seemed to account for the initially solitary smokers' attributions to smoking; the most influential being a parent's smoking pattern. Both observational learning and classical conditioning of emotions were evident. Consider the following examples:

(Betty-27) I was 21 and had just broken up with my first serious love. I went out and bought a pack of cigarettes—the drama was definitely a heavy factor—an expression of pain. I was alone. I remember being in class and thinking "Oh, I can't stand this, if only I could get out of here and have a cigarette."

Betty noted the similarity to her mother's smoking. Her mother would say "I can't stand this—I need a cigarette!"

...I can't say definitely why I got the cigarettes—maybe it was more of an expression to the world that I felt bad. My boyfriend smoked but I had never smoked with him.... When I got the cigarettes I bought the same
brand he smoked. It was also the same brand that my girlfriend smoked.

(Rick-32) I was in my first year of college [away from home] and I was uncomfortable being there. There was a lot of pressure. I just went out and bought a pack and smoked it alone. From then on I mainly smoked by myself in the car. I got up to less than a pack a day there. The next semester I went to another college. I didn't know anyone. I wasn't really enjoying smoking. I mostly smoked out of habit, boredom and nervousness.

Rick's mother, an intermittent smoker, had smoked primarily when she was upset or nervous.

(Ellen-19) About a year ago I started smoking a pipe. I love the smell of tobacco--just pipe tobacco--and decided to start. No one around smokes a pipe except my father--once a year at Christmas. I went out and bought a pipe and my boyfriend bought me the tobacco. He doesn't smoke anything. I smoke it once a month, usually on the bus going home or sitting in my room or on rainy nights if I go for a walk.

When Ellen had described her father earlier in the interview she said he was "the best guy in the world."

For Betty and Rick, observation of a parent's smoking served as a model for their own smoking initiation in a particularly stressful situation. Neither had been exposed to many smoking peers before, although both had experimented with cigarettes a few times. It is possible that peer smoking practices are the more important factor if one has smoking peers--whether one's parents smoke or not. However, when surrounded by nonsmoking peers, parental smoking behavior may be the more important factor. Kandel (1973)
observed a similar pattern of parent and peer influence in a study of parental drug use and adolescent marijuana smoking.

**Classical conditioning of emotions.** Ellen's pipe smoking and Brian's cigarette smoking (see the case study) illustrate not only the possible operation of observational learning but quite probably the classical conditioning of emotions. Ellen had great affection for her father. No doubt the association, although infrequent, of the smell of the pipe smoke with her father resulted in a positive emotional response to pipe smoke. The pipe smoke then could be used as a conditioned stimulus to elicit similar feelings. Several of the other respondents noted that cigarette smoke or pipe smoke elicited certain feelings associated with a parent. One current nonsmoker, Drake, observed that around his father smoke was a pleasant, familiar thing, although he generally disliked cigarette smoke. One respondent's aversion to smoking appeared to be related to her dislike of her mother.

Brian began smoking shortly after he moved in with his mother and new step-father at age 13. Before that, he had been living with his aunt and uncle where he felt "happy" and "protected." His uncle smoked, but neither his mother nor step-father did. He began smoking before he met any other children in the new town, so peer influence did not appear to be related to his smoking initiation. It is possible that, in his case as in Ellen's, the smoke had
become a conditioned stimulus eliciting positive, familiar
emotions which he wished to create in the unfamiliar environ-
ment. Betty's selection of her boyfriend's and friend's
brand of cigarette may have served a similar purpose.

The cases presented here indicate that children whose
parents smoke may also smoke, not only because of observa-
tional learning but because of classically conditioned
emotional responses.

Cognitive factors. As Ted's story will illustrate, an
individual may conclude that cigarette smoking will help
solve a personal problem. Ted first tried cigarettes in his
junior year of college.

(Ted-32) A girl I liked happened to have
cigarettes with her during the break of a
three hour night class. She usually didn't
smoke but suggested we try it. I liked it.
The health risks were not as well known then
and I thought it would help me to lose weight.
I think we did it again the next week but the
next week she didn't have any more so I bought
my own pack. She didn't smoke after that
second week, so I would smoke and she wouldn't.

Ted continued to smoke--primarily alone. Neither of his
parents smoked, although his older brother did. When asked
about his brother's smoking he said "He has the same
problem I do--he gains weight when he stops."

Ted had been overweight as a child and always had been
concerned about his weight. He was not sure where he had
learned that smoking would help him to reduce, although he
pointed out that it is a common belief. He did not mention
the cigarette advertisements as a source of his belief,
though weight-control has been a theme in cigarette advertisements since the introduction of the "Reach for a Lucky instead of a Sweet" ad in the 1920s. The image continues to be conveyed through the ads for "Thin" and "Slim" cigarettes.

It is unclear what effect cigarette advertisements have on smoking initiation. In a study of the general effect of television advertising on adolescents, Ward (1971) found that, although the ads apparently influence the formation of attitudes they do not appear to "trigger" adolescents to buy a product. In the present research only three of the respondents ever mentioned cigarette ads. They felt an image conveyed in the advertisement was related to an image they wished to convey but did not feel the ads were directly related to their smoking initiation. The images and moods associated with cigarette smoking in movies were mentioned more frequently, particularly by the older respondents.

The individuals who initially smoked alone may have had more personal and internalized values attached to smoking from its inception than those who began smoking with peers. The needs met by smoking were less contingent upon peer association. Since peer influences played little, if any, role in their smoking initiation, these individuals may be the least likely to be influenced by peer factors to abstain from smoking. Indeed, the six individuals in the
sample who began smoking in this manner continue to smoke, although they are different types of smokers.

Curiosity

Few of the respondents cited curiosity as a reason for experimenting with cigarettes. The four individuals who did mention it were, with one exception, those who tried smoking only once or twice when they were very young or when they reached adulthood. This may not mean that curiosity does not play a role; rather it could indicate that those who continue to experiment with cigarettes see other factors as more compelling explanations for their behavior.

Rebelliousness

Cigarette smokers have been found to be more rebellious than nonsmokers in several studies. Teenage smokers were found to have had less satisfactory relationships with authority in general and parents in particular (Salber & Rochman, 1964); teenage girls and young women who smoked were more likely to use marijuana and alcohol and to have run away from home (National Cancer Institute, 1976). In a longitudinal study, Steward & Livson (1966) found that rebelliousness (as defined by report cards on conduct and staff ratings of resistance to authority) antedated smoking.

Three of the thirty-eight respondents who experimented with cigarettes mentioned rebelliousness as a factor related to their smoking. Their rebellion did not appear to be directed at their parents; rather it was described in more general terms:
(Don-32) I really began smoking when I joined the neighborhood gang, in junior high. I got involved with older guys who were regular smokers. I wanted to be identified with them by others. The gang was large--probably five hundred members. It wasn't just a street gang, it was part of a whole social system--almost like family. Adolescent smoking was considered an adult behavior in part, but also rebellion--defiance of authority. The teenage role models in those days always had a cigarette--Marlon Brando, James Dean--and the city gang films were oriented toward that image.

(Joan-28) I thought smoking made me seem older and sophisticated but there was also a definite tone of rebelliousness in it--against everyone in general. I enjoyed being different and that was one more way of being different. I considered it very daring to be different.

(Karla-18) [In response to the question of how she would try to prevent her children from smoking if she ever had any] I would tell them why I think I started--because at that time I was really rebellious. I was against everybody--I still am.

Three respondents talked about being anti-establishment and involved in the anti-war movement during high school or college. These three respondents did not, however, directly relate their cigarette smoking to these attitudes. One, Betty (27), became an activist during high school and also began marijuana smoking at that time. She did not begin cigarette smoking until six years later--when she was twenty-one. Tim (27) became active in anti-war demonstrations while in high school at age fifteen. He had begun cigarette smoking at fourteen and six months later started smoking marijuana. Ted (32) began cigarette smoking and marijuana smoking in his junior year of college. He said that in his sophomore year he had become "anti-establishment,
anti-Vietnam, counterculture and into drugs." The cigarette smoking, however, was related to an attempt to lose weight.

If the respondents had made no reference to rebelliousness during the interviews, the last question asked was "Did you consider yourself rebellious as a teenager?" The demand characteristics of this question are apparent. The interview dealt with cigarette smoking, and apparently many people believe that cigarette smoking per se is a sign of rebelliousness. Thus, the respondents who had just described their smoking histories may have felt they were expected to say they were rebellious, i.e., "Smoking is a rebellious behavior; I smoked; therefore, I must have been rebellious." Other than the six respondents already mentioned, only one said unequivocally that he was rebellious in high school:

(John-25) Yes. I didn't like anything with authority.

The other respondents who had smoked either gave a definitive "no" or reported rather peripheral rebelliousness. The following are samples of their responses:

(Nina-22) To some extent. Like my parents were all upset because I decided to go to a state college rather than a name college.

(Denise-43) In the conventional sense, no. I rebelled against my mother trying to guide me too much but was not rebellious toward school rules.

(Bess-33) I guess I wasn't really rebellious—it was mostly in my head. I felt it more than acted on it. I was stubborn.
(David-35) I was a prankster—rebellious
but more in the form of pranks.

Since alcohol and marijuana use by teenagers fre-
quently are considered rebellious behavior for teenagers,
the use of these drugs was compared with cigarette smoking.
Although no questions were directly asked about the use of
marijuana and alcohol, a number of the respondents volun-
teered the information. As noted in the discussion of peer
influence, several respondents who conformed to peer
behavior in smoking cigarettes resisted peer pressure to
drink. Several others who smoked in high school mentioned
that they neither drank nor used marijuana. On the other
hand, three of those who never smoked cigarettes in high
school volunteered that they either drank or smoked
marijuana:

(Karen-20) I did get drunk in high school
...I also smoked marijuana a few times
then. It was a social thing....My rational-
ization for smoking pot is that it does
less damage than booze.

(Lance-31) I started drinking before my
junior year of high school. I went to a
lot of parties and did a lot of drinking
and running till late hours.

(Lisa-19) I used to drink all sorts of
stuff. I got in a lot of trouble with it.
I got drunk and went to school dances and
babysat. A girlfriend in ninth and tenth
grade and I drank every other weekend for
something to do.

Neither Lisa nor Lance considered themselves rebellious as
teenagers. Karen said she was rebellious only about
cigarettes because she was very anti-smoking. She said she didn't see growing and smoking marijuana as rebellious.

On the whole, the respondents did not view their own smoking as a part of rebelliousness, and no one cited rebellion against their parents as a motive for smoking. Rebelliousness appears to be used to explain a variety of behaviors when, in fact, it explains little. It may be more useful to study specific reasons for "rebellious" behavior as well as how individuals come to apply the label to some acts and not others.

Other than peer influences, the factors that the respondents reported as most influential in their smoking initiation were:

1. Observational learning: modeling parental uses of cigarettes
2. Classical conditioning: conditioned emotional responses to cigarette smoke
3. Weight loss: advertising and societal suggestion that smoking aids weight loss
4. Belief that smoking projects a rebellious image

**Summary**

In this chapter the focus has been on the factors that prevent cigarette smoking as well as those that lead to initial experimentation with cigarettes.

The changing cultural value of smoking and the sex role convergence over the past 30 years resulted in differential analyses for the older and younger respondents in the
sample. As cigarette smoking became less normative, the smoking status of the people in the individual's immediate environment played a more important role in smoking initiation. The factors that appeared to be most influential in preventing smoking were:

1. (For females) Negative stereotypes about female smokers or adherence to traditional sex role distinctions.
2. Greater parental than peer attachment.
3. Developed aversion to cigarettes.

The respondents who had not been affected by these preventative factors were likely to experiment with cigarettes. There was little evidence of strain in the initial smoking experiences of the respondents. They did not report that they received a great deal of overt pressure to smoke. The factors that were cited most frequently as being associated with experimentation with cigarettes were:

1. Cultural acceptance of the behavior.
2. Peer group acceptance of the behavior.
3. Desire to be accepted or to "fit in" with a new peer group.
4. Personal attributions unrelated to peer group values.

Other factors that frequently are cited in the literature as influencing smoking initiation such as curiosity, rebelliousness, media images, and advertising were more relevant as secondary than as primary influences on the behavior.
CHAPTER V

TRANSITION TO REGULAR SMOKING

An occasional experimentation with cigarettes does not invariably lead to regular smoking. While Russell (1971) reported that only 15\% of adolescents who had more than one cigarette did not go on to become regular smokers, Salber, Welsh and Taylor (1963) found that 20-25\% of students who had experimented did not continue. In the current research, of the respondents who had smoked at least three cigarettes in high school, 21\% did not go on to become regular smokers (defined as short term, intermittent, light, or constant smokers).

The transition period between smoking initiation and becoming a regular smoker has been virtually ignored in research on cigarette smoking (Dunn, 1973; Leventhal & Cleary, 1980). McKennell and Thomas (1967) found that the transition period for teenage smokers was slightly less than three years for boys and slightly more than two years for girls. The length of the transition period was related to the age at which the teenager initiated smoking; the younger the age at initiation, the longer the transition period. Boys, on the average, start smoking at a younger age than girls; however, in recent years this difference has all but disappeared (National Institutes of Health, 1976).
Cross-sectional studies have demonstrated that in each successive year of school there is an increase in the percentage of students smoking and an increase in the number of cigarettes smoked. Leventhal and Cleary (1980) point out that this cross-sectional data does not reveal whether there is a gradual change in the amount smoked by each individual or whether some individuals rapidly increase their smoking while others make a gradual transition and others remain at low levels.

Leventhal and Cleary discuss the process that may be involved in the transition to regular smoking and the development of a self-image as a smoker:

Several nonverbal motivational systems, iconic, kinesthetic, autonomic and so forth, may be involved in integrating smoking with a variety of coping responses before the individual fully develops this self-concept [as a smoker]. Restricting the situations in which smoking occurs and developing a narrow definition of the functions of smoking (i.e., as a social gesture) may help prevent the development of heavy addictive smoking. (1980, p. 386)

The retrospective accounts of the respondents in the current research allowed an examination of the factors related to the transition to regular smoking. Because the transition period is longer for individuals who begin smoking at a younger age, the restrictions on youthful smokers were examined to determine their impact in delaying the onset of regular smoking. The restrictions on teenage smokers take the form of (1) laws on the purchase of
cigarettes by minors, (2) expense of maintaining a regular cigarette habit, (3) school rules on smoking, (4) peer disapproval, and (5) adult disapproval.

The factors related to the development of a smoker identity also were examined. The experimental smoker does not immediately develop a smoker identity (Leventhal & Cleary, 1980). Rather, as will be discussed, a predictable pattern of events culminates in a self-identity as a smoker. Few of the respondents defined themselves as smokers before graduation from high school although many had smoked throughout junior and senior high school. Self-definition as a smoker was not related to the length of time the individual had smoked but was associated with the removal of restrictions on smoking. The pattern that emerged from the respondents' interview data will be the focus of this chapter.

Factors that Prolong the Transition Period

Cigarettes are legally unavailable to most young teenagers. All but a few states have laws that restrict the sale of cigarettes to minors. Since unmonitored cigarette machines can be found in numerous places, these laws appear to function more to delay the development of a regular cigarette habit than to discourage smoking altogether. Although the price of a single pack of cigarettes is within the budget of many youngsters, the expense of a regular habit is another limiting factor. Most youngsters know
someone who smokes--if not family members, then school friends. Yet one typically cannot maintain a regular habit by "borrowing" others' cigarettes.

Most grade schools and junior and senior high schools do not allow students to smoke on campus. Most parents do not allow their minor children to smoke at home, or, indeed, in their presence. As noted earlier, some youngsters do not want disapproving peers to see them smoking. These factors combine to prevent most youngsters from becoming regular smokers before they leave high school.

**Laws and Expense**

None of the respondents who began smoking as minors indicated that it was particularly difficult to obtain cigarettes. Many said that they originally "swiped" them from their parents or siblings. Almost all of the respondents who smoked in junior and senior high school "borrowed" cigarettes from friends for months, and sometimes years. The respondents all reported that they had no difficulty purchasing cigarettes in stores although cigarette machines were the main source for the respondents who were smoking in their teens--sometimes necessitating strategic maneuvers. One respondent reported that he and his friends would "stake out" a cigarette machine so that no one would see them make the purchase.

The cost of cigarettes was not mentioned as a limitation on smoking by the nineteen respondents who had smoked more than a few cigarettes in high school. By the end of
high school six of the nineteen smoked only sporadically; ten averaged two to five cigarettes a day; two smoked ten cigarettes a day, and one smoked a pack a day (during his senior year). These figures indicate why cigarettes were not difficult to afford or obtain. Since even the consistent smokers sometimes obtained cigarettes from family and friends and most did not reach this rate until their senior year, no one had to maintain a regular habit for a long period of time. Almost all of these individuals had a job in high school, providing spending money of their own.

School Rules/Parental Disapproval/Peer Disapproval

The laws on the sale of cigarettes to minors and the expense of cigarettes did not appear to limit smoking for teenagers to the same extent as school rules and parental and peer disapproval. This may have been because the school rules and disapproval were so powerful in keeping smoking to a minimum that the laws and expense did not have an opportunity to affect the behavior.

School rules and parental and peer disapproval had an additive effect in limiting teenage smoking. When smoking was not allowed at school and parents and peers disapproved, the teenager was likely to smoke sporadically. If smoking was permitted at school and parents and peers either accepted or tolerated smoking, the teenager was likely to develop a daily habit. In most cases, however, the sanctions were not so consistent.
Of the nineteen individuals who smoked in high school, the one who developed the heaviest smoking pattern during his senior year was Raymond (48) who, although not allowed to smoke at school, was allowed to smoke at home. He reported that smoking was not only accepted by his parents and peers but was, he believed, a requisite behavior for males.

The two individuals who smoked at least ten cigarettes a day in high school attended schools where smoking was permitted. Sarah (21) smoked openly at school as did most of the students. She also smoked at work and at home with her sister when her parents were out. Sarah was the only respondent under thirty who said smoking was allowed at school. Brian (33) also reported that smoking was allowed at school, but the smoking area was in an inconvenient location so he and his friends preferred to try to "get away with" smoking in the bathrooms. He reported that boys' smoking generally was accepted by his peers. Although his mother initially was upset about his smoking, eventually she allowed him to smoke--except in the house.

Of the ten respondents who smoked two to five cigarettes daily by the end of high school, two (a short-term smoker and a light smoker) were allowed to smoke at school. Both also smoked in front of their parents. Five of the respondents smoked in the bathrooms with their friends. One of these also smoked at home. The other three had negative
stereotypes about students who smoked at school and would not smoke there. None of their parents knew they smoked.

Six individuals smoked sporadically in high school and never smoked at school, even though two said smoking was permitted in a designated area. None of these individuals wanted to be identified as a smoker and tended to smoke only with a single friend or a small group of friends. Their parents did not know they smoked.

Peer disapproval appeared to be the most potent force in limiting smoking, particularly if the individual perceived that the majority of his or her peers did not smoke. Students in this situation were less likely to smoke at school, thus inhibiting a daily cigarette habit. School rules against smoking, combined with peer disapproval, effectively prevented smoking at school for most of the respondents. Even without concomitant peer disapproval, school rules against smoking deterred regular smoking.

Just as peer disapproval was a major force in limiting teenage smoking, parental approval appears to have been the major factor in increasing the likelihood that the teenager would develop a regular cigarette habit. Parental disapproval of smoking did not necessarily prevent the teenager from smoking but it did force the youngster to hide the behavior and thus decreased the opportunity for a regular smoking pattern to develop.

Only one of the respondents (Raymond, 48) reported that his parents readily accepted his cigarette smoking while he
was in high school. He reported that he smoked as much as a pack of cigarettes a day. The other respondents who reported that their parents allowed them to smoke, or allowed them to smoke at home, stated that the permission was given grudgingly. Permission apparently was given when the parent(s) acknowledged that they could not prevent the teenager from smoking and preferred that s/he be honest about the behavior.

Meyer, Friedman and Lazarsfeld (1973) suggest that parents who themselves smoke are in a particularly uncomfortable position when they object to their children's smoking. They reported the following parental reactions:

Some parents, often those with less education, see smoking as natural. They tell their children to wait until they reach a certain age or are old enough to "buy their own." The more educated smokers are more likely to express dismay at the "hypocrisy" of "do as I say, not as I do." To regain some semblance of control, such parents sometimes say, "If you must smoke, do it in front of me." (p. 250)

While the individuals in the sample who received parental permission for smoking were not necessarily the heaviest smokers, they did more closely approximate their eventual smoking rate while in high school than those who did not receive parental permission. In combination with peer acceptance, parental permission appears to result in the most regular smoking.

From the current data it would appear that if parents wish to delay the onset of regular smoking by their teenage
children who smoke, they would be wise to suffer the hypocrisy and prohibit smoking. While this tactic alone will not prevent the eventual onset of regular smoking it may help to extend the transition period. A longer transition period allows more opportunity for intervention.

It appears that the more factors that operate to force teenagers to hide their smoking, the less often they will smoke. The fewer cigarettes they smoke, the less likelihood they will become physically or psychologically dependent on cigarettes at a young age.

Removal of Restrictions on Smoking and the Development of a Smoker Identity

Few of the respondents defined themselves as smokers while in high school. The respondents saw a clear distinction between saying that they smoked cigarettes and defining themselves as smokers. Three factors were related to a smoker self-definition:

1. Reduction or removal of restrictions on smoking
2. The establishment of a regular smoking pattern
3. The perception of personal as well as social motives for smoking

Development of a Smoker Identity

The restrictions on teenage smoking were removed abruptly when the individuals graduated from high school and, in most cases, moved away from home. The removal of restrictions on smoking led to an increase in the number of cigarettes smoked. The individuals who had smoked primarily
in social situations also began to smoke alone. At this point the individual was likely to define him/herself as a smoker. The respondents who had smoked in high school illustrated this pattern:

(Cathy-35) I defined myself as a smoker when I was 18 and went away to school. When I got to college I started smoking more.

(John-25) I defined myself as a smoker when I was 17—when I moved away from home and smoked out in the open. There was no more fear about being caught and I could smoke in my own apartment. Until then I had to hide it. When I was working I looked forward to a cigarette and realized I was a smoker then. I stopped thinking about it. It was no longer the peer thing—I smoked by myself. Before that I rarely smoked alone.

(Maggie-31) I didn't define myself as a smoker until I got into college....I was smoking a pack a day then. As soon as I got away to college it zoomed right up.

(Sarah-21) I was smoking a half-pack a day in high school. In college I got up to a pack a day. I defined myself as a smoker when I had been out of high school a year—when I felt I was hooked.

Graduation had removed not only the school restrictions on smoking but the peer disapproval as well. The respondents observed that peer disapproval for smoking had been greatest during the secondary school years. Parental disapproval was still a factor for several of the individuals. They dealt with this by reducing or hiding their smoking when they returned home for holidays. The individuals who continued to live at home after graduation, and whose parents disapproved of smoking, did not increase their
smoking or define themselves as smokers until after they moved away from home.

The individuals who started smoking after graduation from high school reported fewer restrictions on their smoking. The transition period for these individuals was short compared to the transition period for the high school smokers. The respondents who began smoking after high school rapidly developed their eventual smoking rate and defined themselves as smokers within a year or two after smoking initiation:

(Rick-32) I started smoking during my freshman year of college...I got up to almost a pack a day that first semester at college....I defined myself as a smoker within the first year.

(Belle-34) I started smoking in my junior year of college....Toward the end of that year I got up to two packs a day. I defined myself as a smoker right away.

(Denise-43) I started smoking my first year in college....I got up to a half-pack a day the first semester. At some point during the first year or two I defined myself as a smoker.

(James-32) A couple of weeks after I started smoking [in the military] I defined myself as a smoker.

(Joan-28) I moved into the dorm in my second year of college. I lived with my friend, Carol, who also smoked. We smoked in the dorm and in class. I was hooked on cigarettes then and was smoking at least a pack a day. I defined myself as a smoker between my junior and senior year of college--after I got married--because then I wasn't limited in smoking although I still wasn't smoking in front of my parents.

Several of the respondents reported that they defined themselves as smokers when they still were in high school.
The reduction in restrictions on smoking that occurred after graduation for most of the high school smokers, occurred for these respondents during high school. Don (32), Brian (33), and Ray (48) were given parental permission to smoke while they were in high school, and defined themselves as smokers at that point. Karla (18), who also defined herself as a smoker in high school, did so when she perceived adult acceptance and reduced restraints on her smoking:

(Karla-18) I defined myself as a smoker in the eleventh grade when I was smoking more regularly--when I was babysitting in a house with a real ashtray. I babysat for this couple every day and could smoke in front of them. I practically lived at their house for a couple of years so it was like my own house when they were gone.

The respondents who eventually defined themselves as smokers evidenced several commonalities. They all reported that they enjoyed some aspect of smoking and not only smoked with others but smoked alone. They smoked daily and felt to some extent dependent on cigarettes. Whatever their original motivation for smoking, they had come to view their smoking as satisfying personal needs or internal motivations.

Self-definition was not related to how long the individuals had smoked. Rather, it was related to the removal (or absence) of a sufficient number of restrictions to allow frequent smoking. When smoking was unrestricted, individuals who had smoked originally in social settings were likely to smoke alone and thus perceive that they smoked for personal as well as situational reasons. Once
this occurred the respondents were likely to define themselves as smokers.

This process leading to self-definition as a smoker is the process Bem (1972) describes in his formulation of self-perception theory. According to Bem, unless our attitudes have been clearly articulated, we come to know our attitudes by observation of our behavior and judgments as to whether the behavior was self-determined. In other words, we use the same cues to infer our own attitudes as we use to infer the attitudes of others. If our own or others' behavior appears to be situationally controlled, we cannot make attitudinal attributions. However, if no external factors are observed to account for the behavior we infer an attitude consistent with the behavior.

The pattern of smoking initiation, transition to regular smoking, and the development of a smoker identity, illustrates this process. Most of the respondents initiated smoking originally in the presence of peers and continued to smoke primarily with others. Little strain was involved in smoking initiation; thus, the respondents were not forced to examine their attitudes at that point. Because of the social nature of the smoking situations, the individual could attribute smoking to situational factors (e.g., "I smoke to be social when I'm with my friends"). Since teenage smoking was restricted they had little opportunity to smoke alone, particularly if they were not allowed to smoke
at home. As the restrictions were reduced or abruptly removed the individuals began to smoke in a greater variety of situations, including alone. The individual, observing the frequency of smoking, and solitary smoking, could no longer attribute the behavior to situational factors. When external factors were not clearly present to account for the behavior, the individual made a dispositional attribution (e.g., "I must smoke because I like it--I must be a smoker").

The individuals who began smoking after high school made this dispositional attribution earlier in their smoking career. The lack of restrictions on their smoking allowed them to rapidly achieve their eventual smoking rate. The individuals who initially smoked alone also made this dispositional attribution early in their smoking career because external factors could not account for the behavior. The individuals who continued to smoke only in groups never made the attribution, as will be discussed.

Self-definition Based on Image

The pattern described—related to self-definition as a smoker—primarily was applicable to the younger respondents to whom a smoker identity was less desirable than it was to some of the older male respondents. The older males, who had perceived a cultural acceptance (or more appropriately—preference) for male smoking were likely to define themselves as smokers shortly after smoking initiation.

Three of these individuals (Raymond-48, Keith-47, and David-
35) appeared to base their self-definition as a smoker on their desire to be considered "men."

(David-35) I identified myself as a smoker by sixth or seventh grade. I wanted to be a smoker because that's what men did. These three men were the only male respondents to cite the projection of a masculine image as an important motivation for smoking initiation. One other respondent (Don-32) reported a similar motivation. Don started smoking to be identified with a gang that projected a "tough guy" (a la James Dean and Marlon Brando) image. For these four men self-definition as a smoker was not related to the amount smoked or to the development of more personal motives for smoking. However, the restrictions on smoking were reduced for Raymond and Don who were allowed to smoke at home; and the restrictions were attenuated for all four men by their perception of the general cultural desirability of male smoking. All four men were short term smokers.

None of the younger respondents reported a similar pattern. It is impossible to determine if this was merely a sample limitation or if this pattern was less likely to be exhibited as smoking became less culturally acceptable. This would be an interesting question for future research.

Factors Related to Maintaining a Nonsmoker Self-image

The six individuals who smoked but who never defined themselves as smokers despite rather lengthy smoking histories did not follow the pattern described for the development of a smoker self-image. Their rate of smoking
was unaffected by the removal of restrictions on smoking and almost all of their smoking continued to occur in the presence of others. Three were short term smokers and three were intermittent smokers.

The three short term smokers (Ralph, Roy, and Richard) who never defined themselves as smokers were the individuals who initially indicated that they smoked less than eventually was revealed during the interview. At the time of the interviews all three were opposed to cigarette smoking. They indicated that they never were particularly fond of smoking, although among the three of them they had smoked with some frequency for 14 years. All still were smoking in their first year of college. They rarely smoked alone and their parents never knew they smoked. Two reported that they had inhaled but never had cravings for cigarettes and none had difficulty with smoking cessation. The reasons they gave for smoking were: "camaraderie" (Richard), "something guys had to do to fit in" (Ralph), and "to keep warm on cold nights" (Roy). Roy had one period when he smoked frequently with a group of friends but was unclear about his motivation for doing so at that point. None of the three ever appeared to have developed any more personal reason for smoking.

The three intermittent smokers did not consider themselves to be "real" smokers for various reasons which all confirmed to them that they were not "hooked" on cigarettes:
(Audrey-34) I sometimes suspect that I have an allergic reaction to cigarette smoke. If I smoke a lot--like on the weekends--I get a burning throat and a burning sensation in my eyes. Sometimes I don't sit in the smoking sections in restaurants and I rarely smoke in the morning. I see that as a difference between me and a real smoker.

(Betty-27) I never defined myself as a smoker. If someone asks if I smoke I always go into an explanation--I never just say "yes." My smoking varies. I may go two weeks without smoking then have three-quarters of a pack in one night. Extremes. Cigarettes make me feel terrible. The morning after I smoke my skin feels terrible, there's phlegm in my throat and my eyes swell. I can't exercise after--it really affects my lungs. To me cigarettes are an incredible stimulant--very extreme--much more than coffee. After two I'm trembling and my heart is beating faster.

(Bess-33) I think I've always thought of myself as a nonsmoker or at least never as a real smoker....In college when studying for exams I would get too nervous to smoke. I didn't want to smoke because I was so nervous and thought I would get more nervous if I smoked. I never smoked to calm down. I took tranquilizers to calm down.

Audrey, Bess and Betty had long periods when they did not smoke, although Betty has smoked for over six years and Audrey and Bess have smoked for over 15 years.

A Model for the Development of Smoking Patterns

Many individuals experience physical discomfort during their initial smoking experiences (Pomerleau, 1979) yet go on to become regular smokers. There is evidence that smokers develop a physical tolerance for cigarettes (Office of Smoking & Health, 1979). However, there appears to be no research that addresses individual differences in smokers' ability to tolerate, consistently, different levels
of cigarette consumption. The stories of Audrey, Bess and Betty suggest that some smokers may maintain light smoking rates because of physical discomfort with increased consumption. Heavier smokers may have higher tolerance levels. Several heavier smokers also mentioned physical discomfort when they increased consumption over their normal rate. This limitation on smoking rate may, in turn, limit the situations in which smoking occurs and, ultimately explain different smoking patterns.

The model for transition from experimental to regular smoking discussed previously does not explain why intermittent smokers do not become constant smokers. Nor does it explain why individuals develop different smoking consumption rates. However, by incorporating the notion of individual differences in ability to tolerate cigarettes, a possible model emerges. Consider the following hypothetical situation:

A teenager initiates smoking because of some type of peer influence. Because of the restrictions on teenage smoking, the smoking continues to occur in a limited number of social situations. The restrictions are removed and the individual begins to smoke more frequently. However, increased smoking causes uncomfortable physical sensations. The individual reduces consumption to the previous level (his or her tolerance level for cigarettes). Since smoking originally occurred in social situations, the individual finds the most cues for smoking in these settings and
becomes a long term social smoker—maintaining consumption at his or her tolerance level. Although other interpretations of the data are possible, LeMeitour-Kaplan (1975) found that light smokers were indeed more likely to smoke primarily in social situations.

The individual who has a higher tolerance level for cigarettes increases smoking after restrictions are removed until his or her tolerance level is reached. If the level is a pack of cigarettes a day, this individual will smoke in a greater variety of situations and develop more cues for smoking. The individual who can tolerate three packs a day will develop even more cues. The individuals who have the higher tolerance levels are more likely to become physically addicted because of the greater number of cigarettes consumed.

One implication of this formulation is that the introduction of filter cigarettes in the 1950s and 1960s, and the introduction of lower tar and nicotine cigarettes in the 1970s enabled smokers to smoke more cigarettes before reaching their tolerance limits. (This assumes that tolerance is based on the tar and nicotine content of cigarettes as opposed to the carbon monoxide content which may be of equal strength in unfiltered, filtered, and lower tar and nicotine cigarettes.) According to the 1979 Surgeon General's report, reduction in the tar and nicotine content over time has paralleled an increase in the number of cigarettes consumed by the average smoker (Office of
Smoking & Health, 1979). Thus smokers today, consuming more cigarettes, may on the average develop more cues for smoking than smokers of 30 years ago. If the number of cues for smoking is related to the degree of psychological dependence on cigarettes, smokers today would have greater difficulty with cessation than smokers in the past even though they inhale equivalent amounts of tar and nicotine.

In summary, this formulation suggests an explanation for the development of different smoking rates and patterns. Individual differences in physical tolerance determine the upper limits on rate of smoking which in turn determines the number of cues for smoking. Individuals who can tolerate a greater number of cigarettes would be more likely to become both physically and psychologically dependent on cigarettes. While this model could not predict who would smoke it would, if tolerance levels could be determined, be predictive of the type of smoker one would become once smoking was initiated.

Summary

The transition period is an important research area because of the potential for intervention before regular smoking has begun. The process by which an individual moves from experimental to regular smoking and self-definition as a smoker has not been explored in previous research.
Most of the respondents initiated smoking before high school graduation. Restrictions on teenage smoking such as laws on cigarette purchase by minors, expense of maintaining a regular habit, school rules prohibiting smoking, and parental and peer disapproval served to delay the development of a regular cigarette habit.

The removal of restrictions resulted in the development of a regular smoking habit and the perception of personal as well as social motives for smoking. The perception of personal motives for smoking resulted in the development of a "smoker" identity. Individuals who continued to smoke primarily in social situations never defined themselves as smokers.

It was hypothesized that individual differences in tolerance for cigarettes determined the eventual smoking rate; and smoking rate determined the number of situations and emotional states that would serve as cues for smoking.
CHAPTER VI

SMOKING MAINTENANCE

Environmental, cognitive, affective and physiological factors all play a role in the maintenance of a regular cigarette habit (Pomerleau, 1980). Until recently the physiological dependence and cognitive factors involved have been minimized and environmental cues and affective states have been the focus of research on smoking maintenance (Office of Smoking & Health, 1979). Social learning theory has supplied most of the hypotheses despite the fact that it has functioned less as an explanatory model than a methodology for intervention (Pomerleau, 1979). The theory has led researchers to emphasize the discriminating stimuli that serve as cues for smoking, resulting in the classification of smokers according to the type of external events and affective states that affect the behavior (Frith, 1971; McKennell, 1970; Tompkins, 1966).

More recently a nicotine addiction model, which emphasizes the role of nicotine as a reinforcer, has shifted attention to the physiological factors involved in smoking maintenance. According to this model, smoking in the addicted smoker is primarily an escape/avoidance response to the aversive stimulation provided by periodic nicotine withdrawal (Jarvik, 1977; Schachter, 1978).
An attempt to integrate social learning theory and the nicotine addiction model led to the development of an opponent-process model (Solomon & Corbit, 1973). In this model an addictive cycle is hypothesized in which smoking as an operant behavior is both positively reinforced by a pleasurable consequence and negatively reinforced by terminating aversive withdrawal.

These models have helped to explain the process of smoking and some of the factors that maintain smoking after initiation. They do not, however, address the cognitive factors involved.

An understanding of smoking maintenance has been limited by the preponderance of studies employing fixed-response type questionnaires in which the researcher decides a priori the possible motives for smoking. Respondents are asked to indicate the extent of their agreement with statements of reasons for smoking (e.g., I smoke to calm down). There is, however, little evidence that the motives listed in the questionnaires include all of the possible reasons, or even the most important reasons, for smoking. Fishbein (1977) observed that at present we do not know enough about the attitudes, beliefs, and intentions of the people with respect to smoking decisions. An unstructured interview method allows for an exploration of reasons for smoking not possible by fixed-response questionnaires.

While smoking is maintained independent of social factors, the cultural climate affects the behavior.
Individuals who smoked when it was unquestionably an acceptable behavior had few of the concerns that affect individuals who continue to smoke despite health warnings and expressions of annoyance from others. Thus, in order to place the smokers' answers in the context of their social interactions, it is necessary to examine both the smokers' experiences with nonsmokers and the nonsmokers' experiences with smokers.

Because this chapter offers an exploration of the interrelated beliefs, motives, and experiences of the individuals, numerous lengthy quotes from the interviews will be presented. As Mausner (1973) has noted, cigarette smoking is a complex behavior and in order to understand an individual's smoking one needs to understand the role the behavior plays in the person's life. Single or disconnected quotes may provide easy classification but do not allow for an exploration of interrelationship.

The focus of the first section of the chapter will be the social, affective, cognitive, and physiological factors that the respondents believed maintained their smoking. In this section a discussion of the cues for smoking will be followed by a discussion of the motives for smoking. Because the individuals cited a number of different motives the responses will be organized around what appear to be major reasons for smoking.

The focus of the second section will be the social context in which smoking occurs, nonsmoker reactions to
smokers, and the smokers' perception of, and reaction to, the social pressure exerted by nonsmokers.

Cues for Smoking

Much of our knowledge about the maintenance of smoking has come from behaviorally oriented studies which attempt to determine the situations in which an individual's smoking is most likely to occur (Office of Smoking & Health, 1979). The external and internal conditions that come to control smoking are, according to social learning theory, developed through discrimination of the situations that are and are not reinforcing for smoking.

A number of external conditions and affective states have been identified as cues for smoking including tension, anxiety, nervousness, anger, relaxation, boredom, activity, food (substitution or meal completion), and social interaction. Almost any situation and mood state can come to be associated with smoking. Physical cravings for cigarettes in the addicted smoker are another cue for smoking. The respondents mentioned all of these cues in discussing when they particularly desired a cigarette although tension, nervousness, anxiety, relaxation, and physical cravings were mentioned most frequently.

(Havana-27-Constant smoker) I smoke to relax and when I'm nervous--not when I'm doing things or when I'm busy. It takes up time when I'm bored or have nothing to do. There's a lot of time with nothing to do at the place where I work parttime. It would be hard to quit while I work there--because of the boredom.
(Cathy-35-Light smoker) I smoked more when relaxing and when I'd have a drink—not when I was nervous. I liked it—relaxing after dinner—a time to sit and socialize a little.

(Nina-22-Constant smoker) I smoke when I'm sitting and talking or watching TV. I also smoke when I get anxious or angry—I really want one then. If I'm really into doing something or being active, then I can put off smoking. I get a real craving if I don't have one now. I get a craving about every half-hour.

(Karla-18-Light smoker) I'm fidgety with my hands and mouth too—smoking is something to do. I'm also a stress smoker.

(Betty-27-Intermittent smoker) The need satisfied by smoking is to put something in my mouth. It's connected with coffee, alcohol, and eating. A feeling of security—of doing something.

(Sarah-21-Light smoker) I would be a lot more nervous if I hadn't become a smoker....I smoke alone now but smoke more when I'm with a group of people. I smoke a lot when I'm nervous or relaxing or doing things—it's a sense of security and relaxes me. In tough situations I chain smoke. I look forward to smoking.

To a great extent the number of cues for smoking was related to the number of cigarettes smoked; intermittent smokers reported the fewest cues, heavy smokers the most. In addition, the lightest smokers were more likely to cite social cues for smoking and the heavier smokers were more likely to associate smoking with dysphoric states and physical cravings.

While the heavier smokers tended to smoke in a number of different affective states, some were more likely to smoke when relaxing and some when stressed. It is not clear why such differences occur, although studies of personality
correlates of smoking patterns have addressed the issue. For example, Eysenck (1973) proposed that extroverts smoke to increase arousal and introverts smoke to reduce it; thus, introverts would be more likely to smoke when tense and extroverts would be more likely to smoke when relaxing or bored. Eysenck attributes personality differences in extroversion-introversion to hereditary factors. While his hypothesis has yet to be thoroughly examined, Bartol (1975) failed to confirm Eysenck's hypothesis. In a study employing female subjects, extroverts were found to be more likely to smoke under stressful conditions while introverts preferred to smoke under nonstressful conditions.

Another possibility is that individuals smoke more often in some situations and states than others because they are more often in those states, i.e., people who experience a great deal of stress and anxiety in their lives smoke more in those situations; individuals who experience boredom smoke more when bored because they are more often in that state. Whereas the emotional state the individuals are most likely to experience may be due to personality differences, the fact that smoking occurs during those states is initially more a matter of probability. Once the smoking has occurred repeatedly in a particular emotional state, the state is likely, through association, to become a strong discriminative stimulus for smoking. The individual then may observe the behavior and attribute the behavior to the state (e.g., I smoke because I'm bored). This analysis suggests that the
individual does not smoke, initially, because s/he is bored; rather because s/he frequently was bored, smoking occurred more often in that situation. This is one aspect of the studies on cues for smoking that appears to be ignored. Individuals are asked to indicate the situations in which they are most likely to be tempted to light a cigarette (e.g., Frith, 1971) but they rarely, if ever, are asked how often they are in those situations.

The determination of the cues that are most often related to an individual's smoking, as well as physical cravings for cigarettes, may well explain an individual's pattern of smoking. It is less clear that most of the cues are necessarily the primary motives for smoking, particularly when individuals perceive health hazards from smoking and wish they did not smoke, as was the case for most of the smokers in the sample.

Beliefs that Maintain Smoking

Smoking and Tension Reduction

Sarah's story suggests that tension reduction is not only a cue for smoking but also has become a motive for smoking. She stated that she would be more nervous if she did not smoke. This belief may be part of what sustains her smoking. Indeed, individuals who smoke to control negative affect are more susceptible to relapse after cessation (Jacobs, 1972; Srole & Fischer, 1973).
Smoking and Weight-Control

Some of the factors that maintain smoking are beliefs, similar to Sarah's, about the consequence of abstention. One belief shared by over 50% of smokers and nonsmokers is that weight gain will result from smoking cessation (National Clearinghouse for Smoking & Health, 1976). The concern has some basis in fact. Individuals who stop smoking are likely to gain more weight than those who do not smoke; the weight gain is greatest for males ages 35 to 54 and females ages 35 to 44 (Green & Nemzer, 1973). To individual smokers, the actual percentage of smokers who gain weight upon cessation probably is less important than their belief that they will gain weight, and the value they place on weight-control. For smokers who highly value weight-control, the issue is not a minor one. To date, the issue has been considered ancillary to the study of smoking maintenance and cessation (cf: Office of Smoking & Health, 1979). This attitude is surprising, given the cultural concern about weight-control as evidenced by the popularity of diet books and weight-control centers. Weight-control obviously is not a peripheral issue to many people (Rodin, 1977). Smokers who come to view their own smoking as a method of weight-control must deal with this issue if they wish to abstain from cigarettes. Permanent weight-control may be as difficult as permanent abstention from cigarettes. While both excess weight and smoking may lead to health problems, excess weight may be perceived as more likely to
be associated with rejection in social and personal relationships. People do, indeed, react negatively to overweight people (Allon, 1975). As one respondent said, "Smoking may be unacceptable to some people but it's easier to hide than fat."

Six of the respondents cited fear of gaining weight with abstention from cigarettes as a motive for continuing to smoke; three appeared to view it as a central motive. Two of the individuals had been overweight as children and had unpleasant memories associated with the condition. While weight-control was a central issue, other motives for smoking also were present:

(Denise-43-Constant smoker) I abstained from cigarettes once when I had an apparent heart attack but I started gaining weight and began to wonder if it was more hazardous to be fat or to be a smoker, so I started smoking again. I didn't lose weight when I started again and started right up to the old level of smoking. By this time the cigarette companies had come out with a light cigarette and I told myself they weren't as bad....I had no problem cutting down the tar and nicotine content. It's the hands and something to do with them that's the problem....I smoke now because I can't quit and it relaxes me.

I wish I weren't a smoker--for health reasons. I have no objections on moral grounds, etc., unless you consider suicide as a moral issue--or Russian roulette....I have a cough now from smoking....I really am convinced it's bad for you. I don't think I'll ever quit. My father died when he was 42 and I'm 43. [She said this as though she wouldn't be surprised to die at any time.] Maybe I wouldn't have high blood pressure if I didn't smoke--but I know people with high blood pressure who don't smoke. Also, I wish I didn't smoke for the sake of the kids.
(Ted-32-Constant smoker) [Ted originally started smoking to control his weight.] I smoke because I enjoy it, habit, and something to do. My theory on smoking is that whenever there is a blank period it gives me an excuse to go away from what I'm doing--like studying--a cigarette break. I do the same thing with eating. It keeps my weight down. If I didn't smoke I would be eating. And I also get a certain amount of enjoyment from smoking--like the feeling of heat in my lungs. The positive side of quitting is I'd save money; and I wouldn't have to carry them around with me; and I wouldn't have to worry about whether I can smoke around someone. Also for my health, and the mess.

The negative thing about quitting is the weight gain. It's my "biggy"--if they had a substitute I'd be more than happy to do it. I've been fighting weight always.

I'm smoking more cigarettes with Carltons but probably not doing as much damage because the last time I quit I had no physical symptoms. One pack of Carltons equals one regular cigarette....I also noticed I'm inhaling less now--I blow it out quickly. I think I feel it in my breathing but was recently playing racketball with a physically fit friend and he was winded and I wasn't. Also the coughing, but that's been less since I switched to Carlton. I cough up phlegm which worries me but it doesn't happen often. I feel like my lips are corroded--sunburned. I probably have the beginning of lung cancer--I know they're damaged since I'm inhaling all that smoke.

(John-25-Constant smoker) Some days I wish I weren't a smoker--when I see people jogging down the street and think how healthy they look....I would have been healthier if I hadn't become a smoker....but nothing shows up on the physical exam I have once a year--I'm a bit of a hypochondriac....I guess I smoke because I like it. I'm afraid that quitting will make me fat again. Everyone I know who has quit gains a lot of weight. My mother-in-law ate six pounds of fudge after quitting--she smokes again now. She had gone through the Shick center to quit.

If I hadn't started smoking I would have had a normal life. I started fitting in with other folks. Otherwise I would have stayed like I used to be and applied myself in school.
Both Denise and Ted gained weight when they tried to abstain from cigarettes. John never has attempted to cease smoking.

Several of the women smokers who were concerned about weight gain with cessation either intended to, or did, abstain from cigarettes when they were pregnant. While they reported that they were concerned about the hazards of smoking to the unborn baby, many also observed that they were not concerned about weight gain during that time. As one remarked, "You don't have to worry about looking fat when you're pregnant!"

Women who view smoking as a means of weight-control may be particularly dependent on cigarettes. Body shape affects ratings of attractiveness (Staffieri, 1972), and attractiveness is a particularly potent cue in judgments of women (Bar-Tal & Saxe, 1976), affecting ratings of personality, intelligence and adjustment (Reis, Nezlek & Wheeler, 1980). More importantly, a woman with a poor body image may have strong feelings of inadequacy (Kurtz, 1969). Thus, it is not enough for smoking cessation messages and programs only to "counter" weight-control concerns as suggested by the Surgeon General (Office of Smoking & Health, 1979) or to point out that "the health risk of a few temporary extra pounds is negligible when compared to risks of smoking" (Danaher & Lichtenstein, 1978, p. 153). For smokers whose concerns about weight gain with cessation are a major factor in smoking maintenance, specific techniques for controlling
weight gain must be an integral part of messages and programs for smoking cessation.

Smoking as a Means of Facilitating Thought Organization

Three of the respondents (Jane, James and Jay) believed that smoking was important to their ability to organize their thoughts. There is evidence that nicotine may have a positive effect on learning and memory, particularly in enhancing the memory consolidation process (Andersson, 1975; Carter, 1974; Dunn, 1973). However, the respondents appeared to believe that it was the act of smoking more than the physiological effects of the nicotine that was important to thought organization. Whether or not nicotine had any effect on this ability is less important than the individual's beliefs. For Jane it was a central reason for smoking maintenance; for James and Jay it was one of several motives:

(Jane-38-Constant smoker) I connect cigarette smoking with talking. When I quit smoking that last time I also stopped talking and my husband couldn't stand it any more so he handed me a cigarette—and I started talking. Smoking is conducive to talking and getting along well with my husband and relaxing together. He quits smoking whenever I give it up. [Although a year after the interview he ceased smoking and Jane continued.]

I feel I don't speak as intelligently or think as clearly without a cigarette. I don't think it's the smoking—rather the habit. It's not the physical part of smoking. But the act of having the cigarette is intimately related to talking....

I smoke more than usual when I'm tense. Also when I'm bored—but I don't smoke as frantically then. I also smoke when I relax—I sit down and take five minutes and relax.

I smoke low tar and nicotine cigarettes.... I think it would be easier to breathe if I quit, and things would taste better....But I
don't believe there are dangers unless you think there are—we cause many of our own illnesses.

As long as anyone cares that I smoke I won't give it up. So as long as the strident anti-smoking campaign exists I won't give up smoking.

(James-32-Constant smoker) I smoke when things slow down, when I'm nervous and when I'm relaxing. I have my first cigarette as soon as I wake up—before I'm out of bed. If I wake up in the middle of the night I have one then. I can take an hour class without smoking but have one right after. I only don't smoke if I'm really interested in something—like if I'm typing.

I smoke because of the physical need and something to do with my hands. It forms a catalyst to organize thoughts—I can start thinking and talking. There's also a [good] feeling at the back of my throat and chest.

There are a lot of negative things about smoking. It gets in my clothes and hair and it burns my eyes sometimes. I have a coughing fit once in awhile in the morning. Sometimes I feel awful. I think I will quit one of these days—it always seems like the next week. It seems like whenever I've just bought a carton or just ended one that I decide to quit.

Sometimes I believe [that there are health risks from smoking] and sometimes I don't. My grandmother lived to be 105 and drank beer and smoked since she was 15.

For years they said cholesterol was bad; now they say it's not so bad. Some day they'll say smoking and drinking are good for you. Doctors go through phases where they must operate on everything—fads. I don't believe anything doctors say. The Surgeon General says it—it's his opinion. I don't trust their opinion—my own is as good.

There are dangers to the lungs with smoking but not cancer. It does cause emphasema but so do a lot of other things. Maybe it's the fumes from lighters and matches that's causing the problems. Maybe if we used heating coils there wouldn't be a problem.

They look for cancer more in smokers. Cancer is a viral infection—you catch it around people with cancer. Doctors don't want to tell you this. They've admitted it in medical journals—but on the back pages.
(Jay-45-Constant smoker) I very much enjoy smoking. I get satisfaction from it. And I get a craving if I don't have one. It just relaxes me. I can sit down and have a smoke—it helps you to think things out and gives you something to do while relaxed and thinking.

Two years ago I switched to filtered cigarettes because they're not as bad for you.... I've considered quitting but it passes. I know it's not good for you but these spells don't last very long. I've talked to people who have tried to quit through hypnosis or something and the next time I see them they're still smoking. I knew a woman who had been hypnotised and that didn't work—which is surprising.

My doctor says "you know you should quit" but he says it in passing. He [the doctor] hasn't found any ill effects yet. The only physical effects I've had are shortness of breath with hard physical labor.

I think the only health hazard of smoking is shortness of breath. If you're in good health there aren't any other effects. If you get asthma or emphysema you shouldn't be smoking. They really don't know about lung cancer--there are so many pros and cons.

Jane and James and Jay were the only respondents who either minimized or denied the health risks of smoking. However Jane had changed to low tar and nicotine cigarettes, Jay had changed to filtered cigarettes and James said he would like to stop smoking. All three reported some health problems that they attributed to cigarettes. The rest of the individuals who smoked believed that smoking was hazardous to health, but did not necessarily intend to stop. The individuals who believed that smoking served an important immediate function (e.g., weight-control, thought organization, and tension reduction) were likely to report that, although they wished they didn't smoke, they did not intend to stop in the near future. They had concluded that abstaining from cigarettes would be the more unpleasant
of the alternatives. Their attitude might be considered analogous to that of the obese individual who, recognizing the health risks and negative social sanctions for obesity, desires to lose weight but believes that the discomfort associated with maintaining a diet would be more unpleasant than remaining obese. Such individuals may report that they do not "want" to lose weight. Given this assertion, one cannot necessarily conclude that the individual has rejected evidence of the health hazards of obesity or is unconcerned about the negative social sanctions. Rather, one might conclude that these individuals are saying they no longer wish to agonize over something they feel they cannot control. Such appeared to be the case for most of the smokers who did not wish to abstain from cigarettes.

Physical Dependence

The relative importance of physical and psychological dependence in smoking maintenance remains to be determined. Circumstantial evidence suggests that the nicotine in tobacco is reinforcing and physical dependence may be a potent factor in smoking maintenance. Cigarettes made of non-tobacco materials and cigarettes with a nicotine content of less than 0.3 mg/cig are not popular (Office of Smoking & Health, 1979). Abstinence from cigarettes creates not only subjective symptoms but also objective physical withdrawal effects (Bone, Phillips, Chowdhury, 1981). Zeidenberg, Jaffe, Kanzler, Levitt, Langone and Van Vunakis (1977) found that serum cotinine levels (a measure of serum levels of nicotine in the blood) before treatment were positively
correlated with self-reports of degree of difficulty in smoking cessation. However, evidence that the severity of the abstinence syndrome is dose dependent is inconsistent.

Russell (1977) has observed that when smokers realize they are dependent on cigarettes the realization can lead to low motivations to quit. Almost all of the light and constant smokers in the sample reported physical dependence on cigarettes was one, if not the most important, factor in maintaining their behavior.

(Tim-27) The main reason I smoke now is habit. I get cravings if I don't have one. The pleasant part of smoking is the relief from the craving. The unpleasant part of it is it hurts my throat... I have my first cigarette about 10 minutes after I get up in the morning. I don't know if I wish I weren't a smoker. There are times when I wish I wouldn't but other times it doesn't matter. I wish I wouldn't when I'm around people who don't smoke or when I get a chest pain or something. It bothers me that I smoke. I'm very much aware of the health hazards--I worry about them.... I don't see myself as being a smoker forever.

(Rick-32) I have no good reasons for smoking--it's just too hard to quit.... I tried to quit once and it was somewhat difficult--I had cravings. I don't think I'll always smoke but I don't know when I'll quit. I'm not very worried about health--maybe subconsciously but not enough to quit. Smoking is getting less pleasant now. And I have high blood pressure.

One positive thing about smoking is psychological--it's relaxing. I also smoke when I'm nervous.

Russell (1981), who has investigated both the psychopharmacological effects of nicotine and the counseling techniques to help smokers stop smoking, believes that many people, including those who research smoking cessation, do not recognize the extent of nicotine dependence involved in
smoking. It is his position that nicotine dominates the behavior over and above psychological factors.

Beliefs that Mollify Health Concerns

Many of the smokers believed their health would not be affected by smoking until they were older:

(Havana-27) I don't have much motivation to quit now--except a little health-wise. I get a little shortness of breath once in awhile. I've smoked enough years now so it's beginning to show the health effects and I worry more now than ever in the past--but I say to myself, "I'm still young."

On the whole, the younger respondents tended to be less concerned about the health risks. Most of the smokers appeared to monitor their own health for signs of damage due to smoking and the older respondents mentioned more problems than the younger ones.

The individuals who had not concluded that the problems from smoking abstinence would be greater than the risks of smoking dealt with their health concerns by stating an intention to cease smoking at some further date. Olshavsky and Summers (1974) suggested that cognitive dissonance (tension) is created when individuals accept that smoking causes health hazards yet continue to smoke. The authors suggest that the dissonance can be reduced by stating an intention to quit smoking.

Another means of combatting the health risks of smoking employed by the smokers was to change to low tar and nicotine cigarettes. The respondents believed this would reduce the risk. With this change some of these individuals, however, also increased the number of cigarettes they smoked.
While lower tar and nicotine cigarettes are correlated with lower mortality rates, the consumption of a large number of low tar and nicotine cigarettes appears to be as hazardous as the consumption of a smaller number of high tar and nicotine cigarettes (Office of Smoking & Health, 1979).

The factors that influenced smoking for the self-defined smokers were not usually the same as those that influenced initiation. The exceptions were the instances in which smoking was initiated alone. In these cases the original motives (weight-reduction, tension-reduction) continued to serve as reasons for smoking. For the individuals who initiated smoking in social settings, the social cues continued to exist but did not appear to maintain the behavior. Rather, the factors that maintained the behavior were the individuals' perceptions of positive and negative reinforcers (including relief from withdrawal symptoms) that developed with continued use. The individuals tended to focus on the positive aspects of smoking until they considered (because of health concerns or social pressure) cigarette abstinence. The expected or observed discomfort or difficulty with cessation focused attention on the negative reinforcers as well.

The current research emphasis on social and psychological cues for smoking appears to be limiting. To speak simply of cues for smoking is to ignore how intimately smoking is enmeshed in people's lives. For some people it becomes an important aspect of dealing with problems or a
source of security; and at the same time that smoking is a cause of stress, it also reduces stress.

Greater emphasis also should be placed on the importance of physiological factors in smoking maintenance. Lichtenstein (1979) has pointed out that intervention studies have failed because they ignore the role of nicotine in maintaining smoking and continue to emphasize the management of stimuli for smoking despite the lack of evidence for stimulus control of smoking.

The examples presented in this chapter are important for what they reveal about how individuals come to view their smoking. It is not so important if what they believe is true—what is important is that the beliefs affect their smoking. To view these comments as rationalization assumes that other motives account for the behavior and the speaker knows these "true" motives. While it may be appropriate to apply the label "rationalization" to the statements that deny the evidence, such as statements which discredit health risks related to smoking, few of the individuals made such statements.

Whether or not the individuals' beliefs about their motives for smoking are true motives, there appears to be little doubt that the stated beliefs affected their smoking and their smoking intentions.

**Social Factors Affecting Smoking**

There appears to be no doubt that the once solid support system for smoking has weakened. While the
nonsmokers' rights movement which began as a grassroots movement in the 1970s, has worked to change laws and attitudes toward smoking, it is not known exactly how the majority of nonsmokers feel about smoking. It is also not known how the nonsmoking forces have affected smokers' attitudes and behavior, although Green (1977) suggests that the pressures exerted by antismoking forces may be creating new reasons for not smoking.

The nonsmoker respondents were questioned about their attitudes and experiences with smokers and smoking. The smokers were questioned about their attitudes toward the rights of nonsmokers and their experiences with nonsmokers. They also were asked if there were places where they did not smoke, in an attempt to ascertain their behavioral response to antismoking sentiments. A large number of both the smokers' and nonsmokers' responses are presented in the following pages to provide the reader a more complete picture of the variety and complexity of the responses. The smokers' responses are interspersed with those of the nonsmokers in order to suggest either where the attitudes differ or where the two groups appear to have different perspectives. While it is difficult to summarize the responses it appears that most of the nonsmokers were, to some extent, annoyed by cigarette smoke and perceived little effort on the part of smokers to limit their smoking. Most of the smokers did appear to believe that smoke was annoying to nonsmokers and did attempt to limit their smoking in the
presence of nonsmokers. Thus, there appeared to be more congruence in attitudes about smoking than in perceptions of the smokers' behavior.

**Social Norms in Transition**

While it is clear that the norms regarding public smoking are changing, researchers have different perspectives on the current status of cigarette use. Markle and Troyer (1979) cite the increase in coercive as opposed to assimilative regulations to control smoking and the tendency of anti-smoking forces and behavioral scientists to stigmatize the smoker and conclude that smoking has become a deviant behavior. On the other hand, Shor, Shor, and Williams (1980) discuss the social support system for smoking which they define as "the interwoven fabric of social definition, beliefs, attitudes, customs, norms, and laws that define smoking as normal, expected, appropriate, attractive, socially acceptable, socially respectable and an implicit fundamental right" (p. 139). They suggest that this system continues to determine the occasions and interpretations of smoking behavior.

The smokers' and nonsmokers' responses indicate that although smoking in shared areas continues to be the smokers' prerogative, the attitudes of both smokers and nonsmokers were more congruent with Markle and Troyer's position. Thus, although behavior that has been normative may be slow to change, there have been dramatic attitudinal changes that are acknowledged by both smokers and nonsmokers.
While it may not appear to many nonsmokers that smokers are concerned about the effects of their smoking, Cameron and Boehmer (1982) compared the attitudes of smokers with the attitudes of marijuana, alcohol, and coffee users and found that cigarette smokers experienced guilt and shame about their behavior, whereas the majority of other users expressed contentment with their habits.

A number of the smokers noted that attitudes toward smoking had affected their behavior:

(Ted-32-Constant smoker) I don't smoke at other people's homes or places where there aren't smokers. There has to be at least one other person smoking. I know for some people it's annoying and they worry about cancer. It's changed a lot in the last few years--people feel more legitimate about speaking up--all the campaigns now. I think the smoke from my cigarettes does minimal damage to nonsmokers. We are imposing on the rights of others, though. We shouldn't smoke in closed spaces. I never have anyone ask me not to smoke because I'm more sensitive to it now and know they won't approve. The social pressure certainly has worked on me.

(Rick-32-Constant smoker) I try not to smoke in restaurants or cars or people's houses if they don't smoke. I try not to smoke where I might offend someone. Now I keep my cigarette down when driving to work--you hate to have anyone see you smoking! ... I don't think there's much danger to nonsmokers--no more than breathing air in a major city. I think the nonsmokers' rights people have valid arguments. I'm for smoking and nonsmoking areas and limits on smoking in restaurants--but not in bars.

(Tim-27-Constant smoker) I usually won't smoke around nonsmokers. I know it bothers some people and I'm concerned about it. If they don't want me to smoke I won't smoke. If they say it doesn't bother them then I still limit my smoking. If there are nonsmokers around
I'm always aware of it. People should respect others. There should be areas for smokers and areas for nonsmokers. If someone's request is nasty though, I blow the smoke in their face and then put it out. Some of the nonsmokers' rights people are fanatical.

(Denise-43-Constant smoker) If I'm in a house of a person with no ashtrays out or feel it's not permissible, I won't smoke. If I know someone is against it or is antagonistic I don't smoke. I don't feel defensive about it--I just feel they have the right to breathe, too.

Smoking is probably dangerous to the health of others but not as dangerous as to yourself. I think the nonsmokers' rights people have a right to breathe free air but I wish they didn't get so obnoxious about it. It's fine as long as they provide a place for me to smoke.

Some of the nonsmokers had a very different perception of the behavior of smokers:

(David-35-Short-term smoker) It doesn't appear that people are reticent to light up. I've been more aware of smokers smoking in places where it could potentially bother someone. I find it a bit offensive. I'm not really bothered except in bars or a disco--my eyes water....I believe that if society says people need to wear seatbelts and must take drinking and driving tests or go to jail because some 25,000 people die due to drinking and driving--then the society should take a stand related to starting smoking.

(Sandra-25-Experimental smoker) I don't particularly like people to smoke around me but I don't stop them from smoking in my house--maybe because I'm a bit of a coward. It bothers my eyes a lot when people smoke and sometimes makes me feel congested. It can be just one person smoking that can cause this....smoke can harm nonsmokers....It's pretty annoying to be eating out and have someone at the next table blowing smoke. But I never ask anyone not to do it. I shouldn't have to ask them to stop--they should have to ask to smoke. I think most smokers don't think about bothering others. Most of my friends don't ask if I mind. It's not necessarily inconsiderate--they're
just not thinking. I think most people would try not to smoke if they thought it was going to bother someone.

The different perceptions of the smokers and nonsmokers may be due to different perspectives. Some of the nonsmokers appear to believe that only total abstinence from cigarettes in the presence of nonsmokers would demonstrate that smokers are aware and concerned that their smoke is annoying. The smokers, on the other hand, believe that they are being considerate if they reduce the amount of smoking around nonsmokers, attempt to keep the smoke away from nonsmokers, or refrain from smoking as long as they feel possible given their dependence on cigarettes. These efforts may be to little avail. Bleda and Sandman (1977) found that nonsmokers did not discriminate between courteous and discourteous smokers; both were rated as less considerate than another nonsmoker. However, the smokers who refrained from smoking during the encounter did rate a courteous smoker more favorably than a discourteous one. The authors concluded that "The observation of a courteous smoker may have reassured smokers who refrained that resentment against those who smoke in public is not fully warranted" (p. 456).

Perceived Inconsistencies

A few of the nonsmokers did believe that smokers were attempting to be more careful although the one who was most accepting of smoking was one of the short-term smokers who, on occasion, smokes a cigar.
(Keith-47-Short-term smoker) I think others' smoke is infinitesimally dangerous. I generally don't find it annoying. I dislike seeing ashes spread all over the place or cigarettes left smoldering. I can't think of an incident when smoking in a restaurant was annoying--maybe because smokers are more careful now. I'm more annoyed by people who speak in a loud voice in public than people who smoke in public. I can't remember if I've ever asked someone not to smoke when it was bothering me. I have a vague memory that I did but can't remember when or where....I think the nonsmokers' rights advocates are smug and overbearing. I can't stand their holier-than-thou attitude.

An individual's smoking status did not necessarily affect his/her degree of annoyance with cigarette smoke. As discussed in chapter III, individuals can develop aversions to one type of smoke but not others. Some cigarette smokers, such as Cathy, perceived this as an inconsistency:

(Cathy-36-Light smoker) It's a matter of common sense. If you're going to smoke and it would bother others, then go where it won't bother them....Some of the nonsmokers are pretty radical. Like my friend Joleen gets carried away a bit. I think it's funny that she hates smoking but smokes marijuana.

(Karen-20-Never smoker--Regular marijuana user) I find it very aversive. I don't like breathing it and don't like what it's doing to the other person and what it could be doing to me. I don't like the odor....I only ask people not to smoke if there's not much room or I'll be there for a long time. Most people have been good about it. I usually move if possible....non-smokers should have rights but people don't like these people screaming about rights. It's the hard route to go but they do some good....it's best to wipe out smoking. People should have basic courtesy--not laws.

(Ellen-19-Experimental smoker--Pipe smoker) I believe cigarette smoke harms nonsmokers. I wear contacts so it bothers my eyes. I hate the smell and it bothers my lungs. I feel I'm
getting cheated out of fresh air. People may feel that way about my pipe tobacco but I like the smell.

In restaurants I've been bothered by smoking and ask people to put them out, and people are usually good about it.

I don't believe you have the right to take away smokers' rights. I would like to limit smoking but that infringes on their rights.

**Smoking as a Health Hazard/Physical Annoyance/Psychological Annoyance**

There is evidence that more people find tobacco smoke annoying today than in years past. In a survey of common annoyances conducted in New York in 1928, Cason (1930) found that second-hand tobacco smoke was not one of the top 20 annoyances. In an attempt to update the list of common annoyances Cameron, Devlin and Cox (1975) conducted a telephone survey in various communities during 1970 and 1971. The authors found that second-hand tobacco smoke was one of the 10 most frequently mentioned annoyances but was only mentioned by 3% of the males and 4% of the females in the sample. (It ranked within the top 10 because of the diversity of the responses.) Children and bad drivers were mentioned with much greater frequency than second-hand tobacco smoke.

More recent questionnaire studies which include specific reference to tobacco smoke have elicited stronger anti-smoking responses. For example, Shor and Williams (1978) conducted a study of college students' attitudes toward smoking. The questionnaire was introduced with an exposition of the viewpoint of the nonsmokers' rights
movement. Under these conditions 81% of the nonsmokers (compared to 26% of the smokers) agreed or strongly agreed that it was annoying to be near a person who smoked. While the smokers were not likely to find it annoying to be near someone who smoked, they did appear to believe that non-smokers were discomforted by tobacco smoke; 17% of the smokers, compared to 8% of the nonsmokers agreed with the statement "Only an insignificantly tiny proportion of non-smokers are discomforted by other people's smoking." While 28% of the smokers indicated uncertainty (compared to 8% of nonsmokers) in response to this question, the majority of smokers and nonsmokers alike believed that smoking is a problem to nonsmokers.

It is not clear if those who are annoyed by smoke or smokers are annoyed because of health concerns, physical discomfort, or attitudes about smokers--or a combination of factors.

The respondents who were concerned about the health hazards of ambient tobacco smoke tended also to find smoke physically annoying. Those who did not appear to be concerned about the long term physical effects on nonsmokers were annoyed because of physical discomfort. The attitudes of both groups toward smokers tended to be mixed although those who had health concerns were more likely also to be annoyed with the smokers themselves.
(Marian-20-Never smoker) If I have to be around it I don't like it and I'm less tolerant now. I wear contacts so in really heavy smoke it bothers my eyes. I'm concerned about the effects from others' smoke. If I'm not going to smoke I'll be damned if I'm going to get cancer from someone else's smoke. If I'm in a car with a smoker I insist on open windows even if I'm going to freeze.

(Nora-20-Experimental smoker) It's only bothered me two times. My roommate (best friend) smokes but I never get mad at her about her smoking or the smoke in the room. If I'm sick or have a cold, in the morning when I come back to the room and it's stuffy it bothers me. My fiance's brother purposely blows smoke in my direction because he knows it bothers me. Smoking isn't much of an issue in any way in my life....Non-smokers' rights groups have a good reason. There are enough places that can be set up for smokers.

(Vera-21-Experimental smoker) I'm not concerned about the dangers to health from smoking--maybe because I'm not around it a lot. It either doesn't bother me at all or really annoys me--if it's right in my face. Maybe because I've been around it since I was little. It doesn't bother me when I'm eating unless it's blown directly in my face. It ticks me off if I ask someone in a restaurant not to smoke and they won't put it out. I usually ask, if it really bothers me....Nonsmokers rights groups go a little overboard sometimes. I'd like restaurants divided or no smoking at all. I think people can go that long without smoking.

In a study of 307 college students, Shor and Williams (1979) found that the physical discomfort caused by tobacco smoke limited the activities of some nonsmokers. In response to the question "Has smoke pollution ever interfered with your capacity to engage in and enjoy the normal social life on campus?" 2% answered "very often," 5% answered "often," and 27% answered "occasionally." Of the
nonsmokers in the present sample, four reported that physical discomfort from smoke restricted their activities.

(Sally-38-Experimental smoker) At the last family gathering in a small house I had to leave because of the smoke. In restaurants I usually have no problem unless I'm right next to them. I got out of jury duty because of the smoking. I think people who smoke should be thoughtful. I've met very few smokers who seem to think about it bothering others—especially women. Men will ask; never women. They don't even acknowledge it....I'm not for laws. I think the problem should be dealt with by the individuals themselves.

(Mae-48-Experimental smoker) When I was growing up I was always nauseous but I never attributed it to cigarettes then. It was only about three years ago that I made the connection....If a room is well ventilated it is annoying--I get a mild nausea but I can cope with it but I don't like it and I get angry. Why should I cope with it? If there's heavy smoking I get nausea, burning eyes, headache, nasal congestion, and sleepy. My husband gets really sick--it triggers his allergy. I suspect smoking is pretty dangerous to nonsmokers because of the symptoms--your body is trying to tell you something.

Our best friends don't smoke. Some of our friends smoke but they don't smoke at our house or when we're with them, or when we're at parties with them. We don't go to big parties because of the hassles over smoking--we just go to smaller parties....It's obvious it's normative to smoke and deviant to ask not to. It's beginning to change among some people now. Women have more of a tendency to at least hold the cigarette away from you.

(Paula-25-Never smoker) I don't like it--it bothers me. I won't get in an elevator if a smoker is in it. When I was in labor and had contractions three minutes apart I wouldn't go in the elevator. Most people are courteous--most don't smoke in dining rooms any more--but I don't go to restaurants without divided sections any more. If we go and someone smokes my husband will get up and leave--it's very embarrassing--it's happened twice. Other times we were moved or the smokers were moved. A lot of his concern is for the children. My husband cuts up his mother's cigarettes when she smokes.
He wouldn't let her hold the babies when she smoked. We don't go some places. I get bummed because my husband gets bummed if he gets a sore throat because of smoking. Like in Las Vegas—so we don't go there because it's so smoke-filled....I think both groups have rights.

Moderation is the key.

Smokers and Nonsmokers in Conflict

While it appears that most of the smokers and nonsmokers believe that the burden currently is on nonsmokers to request that an individual not smoke, there is disagreement over how that request should be handled and the response one might expect from smokers. In a questionnaire study of college students, Shor and Williams (1978) found that only 9% of nonsmokers and none of the smokers disagreed with the statement "Most smokers will stop smoking in shared areas if they are asked politely and are not put down in the process." While the nonsmokers appeared to believe that polite requests would be effective, several related beliefs suggest why the nonsmoker may be reticent to use this approach. Sixty-three percent of the nonsmokers (compared to 35% of the smokers) agreed that "social customs require a person to make believe that he or she is not concerned with another person's smoking." Eighty-five percent of the nonsmokers agreed that "nonsmokers who find smoke aversive often hide their true feelings and suffer in silence because they do not want to make enemies;" 67% agreed nonsmokers hide their feelings because they "don't want to be regarded as oddballs, spoil sports, or trouble-makers."
It appears that, for many nonsmokers, concerns about violating what they perceive as a social norm supporting smoking discourages them from voicing their objections.

One other question in the Shor and Williams questionnaire indicates that another motive also may exist. Sixty-five percent of the nonsmokers agreed that "smokers sometimes become irrationally angry and abusive when someone tries to interfere with their right to smoke wherever they please." It is unclear why nonsmokers have this perception. In a series of studies on the interactions of smokers and nonsmokers in shared areas such as supermarkets, elevators, barber shops and offices, 90% compliance to polite requests to stop smoking was observed (Jason, Clay, Savio, and Martin, 1978). None of the nonsmokers in the current sample reported that they personally had experienced any type of irrational or abusive response from smokers, although one had witnessed a violent response to a request to stop smoking. It may be interesting to explore the possibility that the anti-smoking campaign which depicts smokers as misfits, mentally disordered, and hostile individuals (Brody & Brody, 1977; Markle & Troyer, 1979; Shor, Shor & Williams, 1980) actually has operated to discourage nonsmokers from making individual requests to smokers to refrain from smoking.

It is possible that for some nonsmokers the expectation of antagonistic responses from smokers led to antagonistic requests. The smokers, for their part, frequently reported
what they perceived to be hostile reactions from some non-smokers. While the smokers tended to believe that they would comply with polite requests from nonsmokers, they reported that hostile requests promoted hostile responses.

It would seem that a vicious cycle then was created.

(Lester-33-Never smoker) I think in confined areas it's equally harmful to nonsmokers. It's very annoying. I only patronize restaurants with nonsmoking sections. I've only asked someone I didn't know not to smoke twice. Generally now I think it's rude to smoke and I say to the person I'm with "can you believe those asshole smokers." Generally I look to see if smokers are around before I sit down. I believe most people would put them out if asked but I don't want to give them that courtesy....Mentally cigarettes send a rage through me. I can tolerate a flavored pipe although I know it's not doing me any good....Smoking is so annoying it controls me socially. I don't like to go anywhere where there are smokers. I usually only associate with nonsmokers. I have a friend I like to spend time with but he's a chain smoker so I don't spend as much time with him as I'd like.

We don't give people a choice on other things so why should we on smoking? You can't even buy a car that pollutes. I do consider cigarettes a poison and true health hazard and since society foots the bill I think that society has a right to remove it.

(Don-32-Short-term smoker) I have spells where it's not so aversive. It's always aversive in terms of the smell but other times it's worse in a physical sense. I don't say anything if I'm mildly annoyed but if it's real bad I'll say something but I feel inhibited about doing it. I haven't had any real negative responses--they've been rude but not bad. I once saw a lady on the subway who was hit for asking someone not to smoke....In general I'm in favor of the nonsmokers' rights advocates as long as they don't turn into nonsmokers' rights nuts--like ripping cigarettes out of another's mouth or making scenes.
(Ralph-36-Short-term smoker) I find smoke incredibly offensive—to the extent that I've thought about inventing a water pistol that was accurate at 20 yards to put it out. It's very offensive when I'm eating. I ask people not to smoke if they're at my table, but I haven't asked a stranger because that's too threatening. I think the smokers are the aggressors. They have the responsibility not to pollute my air. In restaurants people are only there for an hour at most so why can't they wait until they get outside... The situation is getting better--definitely.

(Havana-27-Constant smoker) I'm a fairly respectful smoker. If I'm with friends and someone asks politely I'll put it out. I would never light up in someone's house unless I asked first--I've always done that. I usually ask other people if they mind if I smoke. If I'm in a restaurant and I notice others are eating and the smoke is drifting their way I'll put it out.

It's bullshit that smoke from cigarettes hurts others—with all the pollution in the air. I get militant with nonsmokers when they get militant with me. If they're reasonable, fine, but most of them are a bunch of dipshits. I don't think it's usually annoying in my own circles. You always get a flag waver but it doesn't happen too often... One can be a responsible smoker. I believe about one third are responsive—the others aren't being empathic. They're being assholes but you shouldn't limit smoking because there's no real way of doing it.

(John-25-Constant smoker) I don't smoke when one of my co-workers is around. He doesn't smoke so when I'm in his office with him I don't smoke because I know it bothers him even though he doesn't say anything. In vegetarian type restaurants I won't smoke because you feel like everyone looks at you....I'm not concerned about how it affects others' health but now I tend to be more considerate. I think people find it pretty annoying....The nonsmokers' rights groups are ridiculous. The comments all the time are annoying. I get those comments a lot and I really get hostile. If they said "Would you mind smoking over there" instead of calling them "cancer sticks" etc., I wouldn't
mind. They're all very self-righteous. Maybe I feel this way because my father is one of them.

I'm for separation in places because that's only fair.

(Jay-45-Constant smoker) I know some people find it really aversive but I've never had anyone say anything. I don't believe smoke from my cigarette affects nonsmokers. They'd have to get a huge concentration and build-up to have any effects. I don't think it's going to harm them unless they're an asthma patient or something like that. I only don't smoke when I'm sleeping. If I'm around nonsmokers I try to keep the cigarette smoke away from them but don't cut down on how much I smoke. If someone asked me to put it out it would depend on how tactful they were. If it really bothered them I'd probably put it out because one or the other of us wouldn't be there that long.

Only one of the smokers appeared to be totally unconcerned about the effects of his smoking on nonsmokers and unwilling to compromise.

(James-32-Constant smoker) If a person were gasping on the floor then I would stop—otherwise not. I might not smoke if asked the right way by the right person. If someone doesn't like it he can move. I've run into some adamant nonsmokers but smoke anyway. Like my wife—she says she's allergic to it but I don't see any manifestations of that. She dislikes the ashtrays more. I don't think smoke is any more hazardous to nonsmokers than walking in downtown Manhattan....The nonsmokers' rights people are frustrated people looking for attention. Nonsmokers should stay away from some places. People with allergies should stay away from smokers. It's like telling farmers not to cut grass because it annoys some people....If it were against the law then I wouldn't smoke.

The Impact of Smoking on Friendships

Given that cigarette smoke causes physical discomfort for some nonsmokers and some smokers experience physical discomfort with abstinence from cigarettes one would expect
smokers to associate more with smokers and nonsmokers with nonsmokers. In one of the few studies that addressed the issue for adult smokers, McKennell (1968) found that smokers were likely to have many smoking friends. Unfortunately no comparison with nonsmokers was offered.

Clark (1979) surveyed 130 individuals between the ages of 16 and 65 and found that ex-smokers and nonsmokers tended to report others' smoking had a disruptive effect on interactions; smokers tended to report no effect. If, as a number of the nonsmoker respondents in the present study indicated, nonsmokers frequently are reticent to voice their objection to another's smoking, one would expect that nonsmokers would find smoking to be more disruptive than smokers. While most of the smokers indicated that they believed nonsmokers found smoking aversive, a number appeared to assume that, if the nonsmokers with whom they associated said nothing, smoking was not an annoyance. And, since most of the smokers tended to believe that if they smoked courteously they would not annoy the nonsmoker, they no doubt are unaware of the depth of feeling expressed by most of the nonsmokers in the sample.

When nonsmokers who are annoyed by smoke, and smokers are friends, both appear to modify their attitudes or behavior. A number of the nonsmokers observed that smoking by their friends or family was less unpleasant than smoking by a stranger. The smokers were more likely to attempt to curtail their smoking with nonsmoking friends than with
nonsmoking strangers. However, both smokers and nonsmokers in these situations tended to report that they also spent less time with these friends:

(Judy-31-Experimental smoker) My mother's smoke doesn't bother me unless we are in a closed car or if she borrows my clothes. With others, I choke if they have smoke on their clothes. I'm repelled by a person when I can smell smoke on them. Most of my friends are nonsmokers. I wouldn't date someone who smoked because I can't stand the smell--it makes me sick to my stomach. I find other people's smoking very aversive--I ask them not to smoke. It makes me sick, nauseous and bothers my eyes badly. It's worse in the last few years. I have a few friends who smoke but I don't spend a lot of time with them ....In restaurants I've asked to have my table moved and ask to sit away from smoking friends. If I can remove myself I will, but if I get trapped I speak up.

I believe nonsmokers' rights prevail. People have the right to walk around nude but I don't want to look at it and we have laws for that.

(Belle-34-Short-term smoker) I don't have any physical symptoms from smoke but I find it very annoying now--depending on their habits or style. If it's one-to-one and blowing in my face I don't like it. If it's in a disco I don't mind. It depends on the person and how close they are as a friend....I've never asked people not to smoke--you shouldn't try to control their lives. If they light up while I'm eating I'll ask them to wait.

(Travis-24-Never smoker) I've been exposed to it more and more and really get bothered by it. Either it's bothering me more or I'm more able to do something about it. It's not the physical part that's changing as much as my attitude. If someone lights a cigarette in the next room now I know it....I've come to accept smoking with certain people and will put up with it more than with other people who I don't know as well. It's a possibility that I'm less likely to make friends with people who smoke.

I'm concerned with the immediate annoyance which is more obvious but also with the long-term effects. I always ask people not to smoke.
I'm a bit more cautious with strangers—usually I'll move—I'm afraid of retaliation. Most people stop when asked not to smoke.

(Drake-24—Experimental smoker) How aversive it is is really contingent on the person. If I don't know the person the smoke really bothers me....I think the nonsmokers' rights people have something to say but it gets to the point of being ridiculous. I think it's good that it makes smokers aware that it bothers some people. I think smoking will just die out....I haven't asked anyone not to smoke—the norm is for them to smoke—if I'm bothered it's more my problem than theirs.

(Jane-38—Constant smoker) If a nonsmoker is a close friend I will cut down by half--otherwise not. I'm not good friends with people that smoking will annoy. If I'm in a car with a nonsmoker I try not to smoke. At restaurants if I know the person I'm with doesn't like smoke then I'll wait until after they're done eating.

Smoke bothers relatively few nonsmokers except in enclosed areas where it bothers smokers too—and in cars and rooms that aren't well-ventilated. I try to be aware of the people around me and not offend anyone but I get annoyed with adamant nonsmokers. Laws limiting smoking are okay as long as convenient places are provided for smokers.

(Joan-28—Light smoker) I avoid smoking in public places. In restaurants I limit myself to one because I think it's really offensive to other people. I don't smoke at others' homes if I know they don't like it—but I also go there less often.

I'm concerned about the effects on others. It is probably as dangerous to them as to me. I favor laws that limit smoking. Smokers should separate themselves from nonsmokers.

In the 1979 Surgeon General's report it was suggested that the anti-smoking forces may serve to tighten the ranks of smokers. If the anti-smoking forces also operate to discourage youth from experimenting with cigarettes and to
encourage adult smokers to abstain from cigarettes the ranks may become too small to tighten.

In the next chapter the factors that influence motivation and ability to abstain from cigarettes will be presented. While it is clear that the anti-smoking forces affect both the smokers' attitudes and smoking behavior, it is less clear that they also affect the smokers' motivations or ability to stop smoking.

Summary

The cues for smoking are not necessarily the factors that maintain smoking. Determining the situations in which one is most likely to smoke or most likely to want to smoke is not necessarily to determine why the person smokes. Rather, it appears to be the beliefs about the personal value of smoking or, more appropriately, the adverse effects from not smoking that maintain the behavior. Most of the smokers were concerned about the health hazards of smoking. However, they were more concerned about what they believed to be more immediate problems with abstention from cigarettes. Both beliefs about the problems of abstention and the perception of physical dependence on cigarettes were the factors that sustained the behavior for most of the daily smokers. Intervention messages and programs which ignore or minimize these perceptions will meet with limited success. While short term cessation may be possible by controlling the cues for smoking, permanent abstinence
is unlikely unless the individual's beliefs are determined and addressed.

The changing societal acceptance of smoking has indeed affected smokers. It appears that most smokers and non-smokers believe that smoking in public continues to be the smoker's prerogative. However, while the nonsmokers tend to be unaware of the efforts made by smokers to control their smoking, it is clear that nonsmokers' attitudes have affected smokers' attitudes and behavior.
CHAPTER VII

SMOKING CESSATION AND ABSTINENCE MAINTENANCE

Since 1964 an increasing number of smokers have considered smoking cessation. Over 60% of current smokers have made at least one attempt to abstain; within any given year 27% of smokers attempt to quit (Office of Smoking & Health, 1981). It appears that because of improvements in cessation technology (and possibly increased social pressure) there has been an increase in the number of individuals who are able to abstain temporarily from cigarettes. There has not, however, been a concomitant increase in the number of people who are able to remain abstinent. While the lack of long-term follow-ups is a major problem in smoking cessation studies, the studies that have followed the subjects for at least a year find only 15-20% of smokers who stop smoking on their own through smoking cessation programs still are abstinent a year later (Office of Smoking & Health, 1979). Thus, only 5.4% of smokers successfully maintain abstinence each year (assuming the 20% success rate and a one-year abstinence criteria for success).

Approximately 95% of smokers who attempt to stop smoking do so on their own (Office of Smoking & Health, 1979). While numerous studies have explored the successful aspects of smoking cessation programs, little is known about the
process of unaided cessation. There is some evidence that those who stop smoking on their own are more successful than those who attend formal programs (Kasl, 1975). However, of the estimated 29 million smokers who have stopped smoking since 1964, little is known about their pattern of smoking prior to cessation (Office of Smoking & Health, 1979).

Several potentially interrelated factors have been found in various studies to be related to the maintenance of smoking abstinence. For example, there is evidence that successful long-term abstinence is related to the age at cessation (Bossé & Rose, 1973, 1976; West, et al., 1977), the belief that one's current health problems are caused by smoking (Croog & Richards, 1977; Rose, 1977; Srole & Fischer, 1973; Straits, 1970), and diagnosed smoking-related disease (Lebowitz & Burrows, 1977). Thus, individuals who are older and experience health problems directly linked to smoking are less prone to relapse. While younger smokers are more likely to attempt to stop smoking, older smokers who attempt to abstain are more likely to be successful (Office of Smoking & Health, 1981).

A related factor is that individuals whose doctors have recommended abstinence from cigarettes are more likely to successfully abstain (Williams, 1969). While one might expect that most doctors would advise their patients to cease smoking, it appears that many are reluctant to do so. In one large sample survey only 25% of smokers reported that
they had been advised by their physician to stop smoking (National Clearinghouse for Smoking & Health, 1976).

Another set of potentially interrelated factors that are correlated with successful abstinence are personality and lifestyle variables. Successful abstainers have been found to be more extroverted or sociable (Cherry & Kiernan, 1976; Guilford, 1966), to have lower anxiety or tension (Rode, Ross & Shepard, 1972; West, et al., 1977), and to be Type B, as opposed to Type A, personalities (Caplan, Cobb & French, 1975). (Type A personalities are characterized as competitive, hard-driving, and work-overloaded individuals).

Several social factors have been related to successful abstinence. Smokers whose spouse or cohabitant is a non-smoker are more likely to remain abstinent (Meyer, et al., 1973; Straits, 1967; West, et al., 1977). There is some evidence that having friends who are ex-smokers also is related to successful abstinence (Eisinger, 1971). The number of friends who are current smokers, however, has not been demonstrated to be related to adult smoking practices. West, et al. (1977) found that smoking abstinence was related to neither the number of friends or associates who smoked nor the smoking status of parents and siblings.

Several studies now suggest that successful abstinence is correlated with smoking rate—with low consumption smokers more likely to maintain abstinence (Cherry &
While the majority of studies on smoking cessation have been marred by methodological problems or lack of long-term follow-up, attempts have been made in recent years to correct these problems (Office of Smoking & Health, 1979). There appears to be a slight increase in maintenance of abstinence after cessation in newer multicomponent programs which include individualized techniques and extended contacts with participants (Office of Smoking & Health, 1979). It is unclear at present, however, if the recent modest improvements are a result of improvements in the program or a result of increasing social sanctions against smoking (Leventhal & Cleary, 1980).

The focus of this chapter will be on factors related to successful and unsuccessful cessation for the 28 respondents who had gone beyond experimental smoking. The retrospective accounts allowed an exploration of the frequently noted pattern of cessation followed by relapse to previous smoking rate. Because the factors related to cessation rate also were related to some extent to the rate of consumption, the chapter will be organized around smoker types.

In Chapter III four smoker categories were delineated. Three of the smoker categories (intermittent, light, and constant smokers) were defined primarily by rate of smoking. The other category, short-term smokers, was defined by the age at cessation—all had ceased smoking in their late teens.
or early twenties. A separate category was developed for these eight individuals because, in addition to their early cessation, they were distinguished by their motives for smoking initiation and their transitional smoking (as discussed in chapters IV and V).

The individuals defined as short-term smokers could also have been classified according to their rate of consumption prior to cessation. Utilizing this classification, three would have been categorized as intermittent smokers, two as light smokers, and three as constant smokers. In the ensuing discussion the short-term smokers will be included in the appropriate category defined by rate of consumption so that the cessation factors related to degree of dependence on cigarettes will be more clearly illustrated.

Criteria for the Definition of Successful Cessation

The use of one year abstinence from cigarettes as the criteria for successful cessation assumes that individuals who refrain from smoking for a year are unlikely to relapse. According to this criteria 17 of the 28 smokers (61%) at some point in their lives could have been considered ex-smokers. This figure includes five of the six intermittent smokers (83%), four of the six light smokers (67%), and eight of the 16 constant smokers (50%). As these figures illustrate, the heavier the consumption rate the less likely were the individuals to maintain abstinence for a year despite the fact that all but one light smoker and
two constant smokers had, at some point, attempted to stop smoking.

Of the 17 individuals who had abstained for at least a year at some point in their lives, seven (41%) relapsed. One of these individuals subsequently ceased smoking again and had remained abstinent for over three years when his interview was updated. The relapse rate was highest for the heavier smokers. The relapse rate for intermittent smokers was 20% (one out of five); for light smokers it was 25% (one out of four); and for constant smokers it was 55% (five out of nine). If the short-term smokers are removed from this analysis the relapse rate becomes 50% for the intermittent and light smokers and 80% for constant smokers. In other words, only three of the long-term smokers did not return to their previous smoking rate after a year-long cessation. These three long-term smokers had abstained for one to three years at the time they last were contacted.

It is striking that the successful abstainers were primarily the individuals who had smoked for a relatively short period of time or had had low consumption rates. It is not possible to determine how representative these findings are of the general population. While it has been noted that several researchers have found that successful abstainers were more likely to be low-consumption smokers, there appears to be no national data which suggest the percentage of ex-smokers who were in this category; nor is there national data on the percentage of ex-smokers who stopped
smoking after relatively short smoking histories. If the data presented here are representative of smokers as a whole, the percentage of long-term constant smokers who are able to maintain abstinence may be even more discouraging than the 5.4% yearly cessation rate implies.

It is interesting to note that the percentage of smokers who stop smoking each year was not available in the literature. In the present study the 5.4% figure was derived from available estimates of the percentage of smokers who attempt to stop smoking each year (27%), and estimates of the percentage of smokers who maintain abstinence for at least a year after cessation (15-20%). If, as the current data suggest, a large number of smokers relapse after a year long abstinence from smoking (41% in this sample), this 5.4% figure, no doubt, substantially overestimates the percentage of individuals who permanently stop smoking.

Factors in Cessation and Abstinence Maintenance

Most of the smokers in the sample had at one time attempted to stop smoking; only Karla (18), John (25), and Jack (45) had not. Karla said she might quit eventually but had no immediate plans. John and Jack said that on occasion they wished they did not smoke but did not plan to stop. When Karla's and John's interviews were updated their smoking status was unchanged.

The factors related to short-term cessation, long-term cessation, and permanent abstinence from cigarettes
depended, to some extent, on the type of smoker one had been before cessation and the age at cessation. In the following pages the successful and unsuccessful attempts to abstain permanently will be presented.

Smoking Cessation for Intermittent Smokers

The intermittent smokers had the lightest and most variable rate of smoking of all the smokers. They did not define themselves as "real" smokers. They smoked primarily in social situations and did not consider themselves addicted to cigarettes. The three short-term smokers who would have been considered intermittent smokers prior to cessation were Ralph (32), Richard (24), and Roy (19). The three long-term intermittent smokers were Audrey (34), Bess (33), and Betty (27).

The intermittent, short-term smokers reported little difficulty in initial cessation. Ralph reported that he smoked fewer cigarettes after he graduated from high school and enrolled in college. In college he did not associate as frequently with his high school smoking companions and his smoking eventually "just faded out." Richard and Roy both made a conscious decision to stop smoking. Richard stopped because he became concerned about the effects of cigarettes on his breathing. Roy stopped because he associated smoking with a friend whose behavior he began to dislike; he said, "I saw myself--my behavior--in him so I quit." All three had reported little personal value attached to smoking and all three now are opposed to smoking.
The three long-term intermittent smokers had somewhat different smoking patterns. Bess tended to smoke only in social situations and if others also were smoking. For Betty "drinking and socializing" were very strong cues for smoking. While she had no difficulty abstaining at other times she reported difficulty remaining abstinent in these situations. Audrey was the more regular smoker of the three. In addition to smoking in social situations she smoked when stressed. Her husband also smoked.

It might be expected that the emerging social disapproval of smoking would be most likely to influence these smokers to stop smoking. Such appeared to be the case for Bess whose smoking was associated mainly with the smoking behavior of others. However, this was not her sole reason for cessation. Her husband's cessation was also a factor.

(Bess-33) I quit about a year ago. My husband had quit about six months to a year before I did. I think a lot of people were quitting about when I did. My cousin smoked and still does and we're close but it was popular to quit and my husband was talking about it every time I lit up. I became uncomfortable when I smoked and then the process wasn't fun. I worried about annoying others and it took away the pleasure. It wasn't hard for me to quit. I don't remember really quitting--I just did.

The general cultural attitude toward smoking played a lesser role in Betty's cessation a month before the interview, possibly because her smoking appeared to be more intimately tied to the cues for smoking (drinking and socializing) than the smoking behavior of those around her. Betty was most likely to desire a cigarette in certain
situations whether or not others were smoking. This had not been the case for Bess.

(Betty-27) I quit lots of times--to the point of joking. It's not a big effort. I suppose if cigarettes were not on the earth I wouldn't want one.

I haven't smoked for a month. I recently had an eye problem and the doctor thought it was related to smoking so I quit. It's an extreme problem--it's a problem constantly now but I notice it more around smoke or if I'm out late. It hasn't been hard not to smoke the last month unless I go out.

It is possible that smokers such as Betty believe that their smoking is less hazardous to their health because of the low consumption rate. This factor may reduce motivation to maintain permanent abstinence from cigarettes. Foss (1973) found that persons who smoked primarily in social situations and for social reasons were over-represented among former smokers. It would be useful to determine if these individuals remain permanently abstinent or do smoke occasionally throughout their lives.

Audrey appeared to have the greatest difficulty remaining abstinent from cigarettes. Her smoking was similar to Betty's in that she smoked in social situations whether or not others were smoking. However, Audrey also smoked when she was particularly stressed. She abstained from cigarettes when she was pregnant and again for over six months, several years before the interview, but she was unable to abstain indefinitely.
Smoking Cessation for Light Smokers

The individual classified as light smokers were those who smoked a half-pack of cigarettes a day and tended not to smoke in the morning. In a recent study Kozlowski, Director and Harford (1981) defined individuals who refrain from smoking for more than two hours after awakening as "late" smokers. Late smokers were found to be less nicotine-dependent and more successful in attempts to stop smoking than "early" smokers (those who smoke within 30 minutes of awakening). Success was defined in this study as abstinence at a six-month follow-up.

The two short-term smokers who could have been considered light smokers before cessation and the four long-term light smokers in the sample were more likely than the constant smokers to refrain from smoking for a year. The two short-term smokers (Keith-47 and Don-32) ceased smoking in their early twenties. Of the three long-term light smokers who had tried to stop smoking, two (Cathy-35 and Joan-28) had abstained for over a year during pregnancies.

(Cathy-35) I quit when I was pregnant both times. I didn’t smoke during the whole pregnancies. I hadn’t quit before then. Cigarettes didn’t taste good when I was pregnant—they made me sick so that made it easier. My husband still smoked.

The first time I quit for about eight months. After the baby was born I gradually began and then my husband went overseas and I started smoking more.

I quit again with the second pregnancy 17 months ago. Now I’m still on drags and one every now and then. My husband doesn’t want me to smoke around him (he still smokes). He says
since I quit it's stupid to start again--plus he doesn't like to smoke around the kids that much because it sets a bad example. It isn't hard now--I just don't think about it that much.

After the interview Cathy eventually returned to her regular pattern then quit again and now has resumed smoking one-half pack a day.

(Joan-28) Recently my gynecologist told me I should quit smoking. I'm on the pill and had breakthrough bleeding. He really scared me. So I quit for a day and called my sister who is a nurse and asked her if the doctor was an alarmist about the pill and she said yes so I resumed smoking but I've cut down. It was hard, but not too hard because I was scared. I expect to quit when I become pregnant.

Joan did stop smoking when she became pregnant and has maintained abstinence for over 1½ years. Her husband had stopped smoking a year before the original interview and he did not want her to smoke.

Pregnancy was associated with abstinence for all of the women (intermittent, light and constant smokers) who had abstained from cigarettes for over six months and then relapsed. This appears to be a common occurrence. In the National Cancer Institute study (1976) 67% of the smokers reduced consumption or refrained from smoking during pregnancy but returned to smoking. Only the oldest female smoker in the present sample (Denise-43) did not refrain during pregnancy.

The other light smoker who had attempted to stop smoking was unable to abstain for more than a few months. Other than a lower consumption rate, her smoking pattern was
similar to the constant smokers; in fact, she did occasionally smoke in the morning.

(Sarah-21) I've tried three times to quit. The first time I was just out of high school. I quit cold turkey for a few months. It was hard but not as hard as it would be now. I just wanted to quit--I hated it--I'd begun to enjoy it some but still hated the smell and taste in my mouth. I started again when I wasn't getting along with my father and I was very nervous.

The following summer I quit again. It lasted three weeks. I wanted a cigarette so bad. I don't remember why I started again. I thought about them for days and then went out and bought a pack. It had been hard to quit--I quit cold turkey. I asked others for help--I asked them not to smoke around me and not to let me have one.

The third time I tried was about six months ago. I tried to cut down and I cut down for a few days and then found myself smoking again.

Sarah's resumption of smoking illustrates a pattern that frequently was described by the constant smokers. Sarah returned to smoking after her second cessation attempt, not because cravings were elicited by any particular cue, but rather because she had "thought about them for days." Investigators recently have attempted to determine the situations in which relapse occurs (e.g., Goldstein, 1981; Marlatt & Gordon, 1979). There is evidence that individuals who smoke to control negative affect are more likely to relapse (Pomerleau, Adkins & Pertschuk, 1978) and that relapse is most likely to occur in intrapersonal negative emotional states (Marlatt & Gordon, 1979). While this line of research appears fruitful, it may be that in some cases the situation in which relapse occurs is of only ancillary interest. This may be particularly true for
relapse after relatively short abstention periods. Rather than a particular cue precipitating relapse it may be that a gradual wearing down of resistance occurs as the individual struggles to maintain abstinence.

The two short-term light smokers (Keith and Don) stopped smoking in their early twenties. Both cited a general concern about the effects of smoking on health as a motive for stopping. Don developed pollen allergies shortly after he ceased smoking and began to be bothered by cigarette smoke. Keith said he never particularly enjoyed smoking cigarettes. After cessation he continued to smoke cigars daily for several years and now smokes a cigar every few months and a cigarette several times a year. Both Keith and Don reported little difficulty with cessation and few cravings except occasionally after a good meal (Keith) or with a beer (Don). Both men married women who smoked but never were tempted to resume smoking.

Despite their half-pack a day consumption rate Keith and Don reported that they never felt "hooked" on cigarettes. Both reported that before they stopped smoking they could abstain for days without difficulty. Both had begun smoking to convey an image, primarily smoked in social situations, and reported few personal needs satisfied by smoking.

These reports illustrate that the number of cigarettes smoked per day may not be the best estimate of the degree of psychological or physical dependence on cigarettes. While
it now generally is accepted that there is a tobacco withdrawal syndrome, the evidence that the syndrome is dose-dependent is inconsistent (Office of Smoking & Health, 1979). One way to measure dose is by the number of cigarettes consumed. It now appears that this may not be the best measure as smokers can control nicotine intake by varying (1) depth of inhalation, (2) puff rate, (3) length of cigarettes smoked, and (4) tar and nicotine levels (Office of Smoking & Health, 1979). In addition there may be individual differences in nicotine metabolism among smokers who consume similar amounts of nicotine (Zeidenberg, Jaffe, Kanzler, Levitt, Langone, & Van Vunakis, 1977). Many researchers are developing sophisticated methods for the measurement of smoke inhalation and nicotine metabolism (Office of Smoking & Health, 1979) which are vital to a more complete understanding of individual differences in smoking maintenance and cessation.

Smoking Cessation for Constant Smokers

Smoking cessation and abstinence maintenance for the constant smokers appeared to be accomplished with great difficulty. Only four of the constant smokers—Maggie (31) and the three short term smokers, Belle (34), David (35), and Raymond (48) appear to have successfully stopped smoking. Four of the other constant smokers abstained from cigarettes for more than a year and then relapsed. The two women in this group were pregnant during part of this abstention period, although they stopped smoking before they
became pregnant. The two men who abstained for over a year, regularly smoked either a pipe or marijuana during the abstention period.

**Short-term smokers.** The three short-term smokers who had been constant smokers each smoked over a pack of cigarettes a day for three years. Belle and Raymond smoked for only three years; David smoked primarily on weekends until his fourth year of college and first two years of graduate school. Belle stopped smoking shortly before she married a non-smoker:

> I felt I reeked of an ashtray and decided to be considerate of him. Someone had pointed out that I exhaled through my nose and mouth and I didn't like that I did that. So I gave away the pack and never smoked again.

Raymond said he stopped smoking because his throat hurt, he did not enjoy it, and the social world had changed so he no longer needed to smoke to verify his masculinity or to overcome shyness. Raymond later developed a severe allergy to cigarette smoke. David stopped smoking when he went to another town to help a non-smoker friend move to a new residence. Although he smoked again when he returned home, he then realized that he could abstain and decided to quit again. Shortly after that he met his future wife—a non-smoker.

**Smoking cessation in marriage.** Meyer, et al. (1973) have suggested that the most important social factor that affects smoking attitudes and behavior is the smoking status of one's spouse or cohabitant. The present data indicate
that marriage to a nonsmoker helps to maintain abstinence that was initiated before the marriage. However, the four constant smokers who continued to smoke after marriage to a nonsmoker were unable to maintain abstinence despite repeated attempts.

The three short-term smokers married the nonsmokers they were dating during, or shortly after, cessation. Belle and Raymond never resumed smoking after their initial cessation. David did relapse eight years later during a particularly stressful year. He did not return to his previous smoking rate and smoked only in his car. He never smoked in front of his wife and he believed this helped him to again stop smoking. When his interview was updated he had not smoked for almost four years.

Two other constant smokers, Maggie (31) and Havana (27), stopped smoking before marriage to nonsmokers. Maggie (see chapter III) had maintained abstinence for three years when interviewed. Havana did not smoke cigarettes (but did smoke a pipe) for the year he was married, but resumed smoking the day they separated.

Three of the smokers (Joan, Bess, and Joyce) had married smokers who stopped smoking after marriage. Joan and Bess described their husbands as social smokers before cessation. As discussed earlier, both Joan (a light smoker) and Bess (an intermittent smoker) eventually stopped smoking. Joyce (a constant smoker) stopped smoking a few years after her husband, who remained abstinent for five years.
Joyce remained abstinent for three years but both resumed smoking during marital difficulties.

Six of the respondents who smoked were married to smokers. Meyer, et al. (1973) found that individuals in such "united houses" were less likely to report pressure to stop smoking and to believe in the health hazards of smoking. In the present sample, two of the three smokers who minimized the health hazards of smoking lived in united houses.

The smokers in united houses tended to have similar attitudes toward smoking. For example, Audrey and her husband both smoked intermittently and both wished to stop smoking. John, Jane, and Jay all reported that both they and their spouses did not plan to stop smoking. Jane's husband, however, did stop smoking a few years after the interview but he did not pressure her to quit.

Two of the smokers in united households reported conflicts with their spouse over smoking. Tim (27) said that his wife (a light smoker) pressured him to stop. He reported that she believed she could stop if he did. Cathy (35) abstained from cigarettes during her pregnancies and her husband (a smoker) did not want her to resume smoking. Subsequent to the interview Cathy did return to her previous smoking rate.

Relapse after extended cessation. Smoking cessation for the constant smokers was reported to have been extremely difficult. The four constant smokers who appear to have
successfully stopped smoking (David, Raymond, Belle, and Maggie) reported cravings for one to three years after cessation.

Relapse for the constant smokers who had abstained from cigarettes for over six months usually was associated with unusually stressful events:

(Joyce-37) [Joyce had abstained from cigarettes for over three years when this relapse occurred.]

I started again when my husband and I had a big fight. So I had a cigarette and he was angry about that, too. He had begun smoking again but it was minimal. He was having an affair and the girlfriend smoked, too. The fight was over his affair.

(Jane-38) [Jane had abstained from cigarettes for five years when this relapse occurred.]

I started again when the second child was six months old. I started again because we almost got a divorce. I was having an affair--it was the stress. My husband and I were working it out and we both started smoking again.

(Havana-27) [Havana had abstained for a year when this relapse occurred.]

I started again the day we got separated. I said to myself "Bullshit on this!" I was a nervous wreck. I stopped eating, too, and lost 20 pounds. I was smoking about two packs a day for three weeks until I calmed down--then I went back to a pack a day.

Ted (32) stopped smoking when he lived with a non-smoker. He reported that he quit because he "got into a health kick--eating right and exercising." He continued to abstain after the relationship ended, even though he then lived with a woman who smoked. He had abstained for three years when he relapsed:

I started smoking again when I got a job tutoring an emotionally disturbed delinquent kid. He smoked. He was an asshole and I
wanted to relate to him. It was a live-in job with lots of tension. I asked him for a cigarette and it was downhill from there. A week went by and I went out and bought a pack. I was in an "I don't give a shit" mood and had another awful place to live and my life was falling apart. I had broken up with my girlfriend and had no future, no job offers, and my friends were moving away.

Relapse after short cessations. Most of the smokers had made a number of attempts to stop smoking. Many had tried periodically to reduce consumption but all reported that within a three week period they had returned to their usual consumption rate. None of the smokers ever had attended a formal cessation program. All of them quit "cold turkey" at the times they were able to maintain abstinence for more than a day. Relapse after short cessation was associated with cravings for cigarettes although boredom, tension and weight-gain also played a role.

(Havana-27) My doctor told me to quit when I got a physical. I'm thinking of quitting now. I tried a couple weeks ago and lasted two days and then got called in to the place I work part-time and there's nothing to do there but wait, so I started again. Some of the other guys were smoking.

(Ted-32) Last December I quit for 3-4 months because my girlfriend was anti-smoking. I went back to smoking because I was gaining weight and the relationship was fading. I've had four or so two-day quits since then.

(Rick-32) I've made a few half-assed attempts. Quite awhile ago I quit for a week except I smoked cigars. I had cravings. I started again because I didn't plan to quit for the rest of my life.

(James-32) I tried to quit four or five times. The first time was about 1976; the last time
was last May and lasted about two days. The other times lasted 4-5 hours. It was pretty hard--I had cravings.

(Nina-22) I quit when I was pregnant. I've tried to quit since then and it lasts a day and then I go back to smoking. I've done this about three times. I would go on a diet and say I can't do both at the same time.

(Tim-27) I've tried to quit at least ten times. The first time was when I was 17. It lasted a month. I started again after an intimate moment. I quit again but started when I got my draft notice--I was real nervous. Then I quit again for four months but started when my enlistment date was coming up....[He has tried quitting almost every year since then.]

Conclusions

The respondents' reports of their successful (i.e., permanent) and unsuccessful cessations suggest the need for more information about individuals considered to be former or ex-smokers. More reports such as West, et al.'s (1977) five year follow-up of a smoking withdrawal clinic are needed as are more detailed national surveys of smokers who stop smoking on their own. To date, few surveys have provided complete information on the smoking histories of individuals who abstain from cigarettes. The reports either do not reveal the number of years the individuals smoked prior to cessation, the rate of smoking prior to cessation, or the length of continuous abstinence and relapse rates after lengthy cessations. When any of this information is provided it rarely is correlated. It is at present impossible to determine the percentage of permanent abstainers and, of that group, the percentage of individuals who have been short-term, low-consumption smokers. The
present data suggest that the percentage of long-term con-
stant smokers who cease smoking and remain abstinent will
be found to be distressingly low.

Obviously there are problems in using the number of
cigarettes smoked per day as the sole index of dependence
because of the ability to control intake as well as individ-
ual differences in metabolism. Kozlowski et al. (1981)
suggest that the time of the first cigarette of the day may
be a better measure of dependence than the number of ciga-
rettes smoked. They found that individuals who smoked
within a half hour of waking (individuals similar to those
defined as constant smokers in the present study) were less
likely to remain abstinent than late smokers (similar to
the light smokers in the present sample) who waited more
than two hours to have the first cigarette. In the
Kozlowski et al. study the time of the first cigarette was
more predictive of relapse than the number of cigarettes
smoked, the presence of another smoker in the house, or the
spouse's reaction to smoking.

It appears, also, that attempts to correlate the degree
of reported difficulty with cessation and long-term absti-
nence may be of limited value. While in the present study
the constant smokers were more likely to report difficulty
with cessation, the long-term intermittent and light smokers
also appeared to have difficulty in remaining abstinent.
Individual differences in reports of difficulty with cessa-
tion are of comparatively little value as the perception of
"difficulty" is anchored in each person's own experience and allows for no external referent of comparison. Difficulty with cessation and abstention may best be judged by behavioral measures, i.e., the length of abstinence.

The patterns of cessation and abstinence reported by the individuals suggest that social factors influence attempts at cessation but are secondary to degree of dependence in abstinence maintenance. No pattern was found which related successful abstinence to work load, personality, or the smoking behavior of friends. Large sample surveys employing multivariate analysis are needed to elucidate the relative impact of these variables on smoking cessation and abstinence maintenance. The only social factor that appeared to be related to abstinence maintenance in the present sample was the smoking status of the spouse. Marriage to a nonsmoker appeared to only affect abstinence maintenance if cessation occurred before marriage.

All but three of the respondents in the sample had attempted to stop smoking—usually many times. Low motivation did not appear to be the reason the smokers were unable to stop smoking. Russell (1977) has pointed out that the two relevant dimensions in cessation are motivation and dependence. He suggests that while the motivational messages have succeeded in persuading smokers to attempt cessation, the dependency factor has prevented most from succeeding.
The individuals who were constant smokers but did not succeed in abstaining suggest a factor related to the motivational aspects of cessation. Most of the individuals were motivated to stop but to remain abstinent required some force that sustained high levels of motivation. The long-term or permanent abstinences usually were associated with pregnancy and impending marriage of nonsmokers--both factors that might sustain motivation at relatively high levels. The higher cessation and abstinence maintenance rate noted in the literature for individuals with diagnosed smoking-related diseases suggests that smoking-related health problems may also be a factor that sustains motivation. While some may argue that awareness of the evidence of smoking-related diseases also should sustain high levels of motivation, it seems clear that knowledge of these facts usually does not provide the necessary immediacy of concern.

As noted in Chapter VI, Russell (1981) believes that many people, including researchers in smoking cessation, do not realize the degree of drug dependence involved in smoking. Russell (1977) also notes that virtually no progress has been made in helping smokers to overcome their dependence and suggests that there is little evidence that a breakthrough is forthcoming. He concludes that at present, barring prohibition, the most that can be done for most dependent smokers is to reduce smoking-related illnesses by developing safer cigarettes. He suggests that if nicotine is, as it now appears to be, the primary addictive agent in
cigarettes, efforts should be directed toward developing cigarettes with low tar content but medium-to-high nicotine content. While this would not completely eliminate the health risks of smoking, it would substantially reduce them. He points out that it is illogical to reduce the nicotine content of cigarettes as people who cannot stop smoking are unlikely to smoke cigarettes which remove the element upon which they are dependent.

Russell has been surprised by the resistance to his suggestion on the part of many of his fellow smoking researchers. The usual argument is that while the tar and carbon monoxide may be the chief causes of most smoking-related diseases, it is not yet established that nicotine is completely safe. He counters this argument as follows:

Because so many people seem to find it difficult to accept the low-tar medium-nicotine approach, it might be helpful to illustrate it with the following analogy. Supposing that some common disease like arthritis were found to be strongly associated with alcohol intake, and that this were due to the presence in alcoholic drinks of excessive quantities of some trace metal like nickel. Would the solution be to advocate another "Prohibition"? Certainly not. We would seek, surely, to remove the offending metal from alcoholic drinks. There would be no problem about implementing this because people drink for the effect of alcohol, not for the metal; so that the disease caused by the metal could be eliminated, or at least greatly reduced, almost at a stroke. Would it be reasonable for us to hold back simply because preventing the disease by removing the metal would not at the same time reduce the diseases and social ill consequences caused by the alcohol itself? Again, certainly not. To extend the analogy further, supposing in this hypothetical situation, a high correlation were found between the alcohol content and metal content of drinks. Would we waste time by exhorting people to drink beer rather than spirits or, even more ludicrously, expect them to
switch to quarter strength shandy (a mixture of beer and lemonade usually mixed 50/50) and to take it in small amounts, by small sips, from small glasses, as if they were still drinking spirits? This might seem ridiculous, yet it is precisely what we have been doing about smoking. The current approaches to the smoking problem are either to take the path of no-smoking or prohibition, or, on the other hand, to adopt the low-tar, low nicotine approach which is analogous to the quarter-strength shandy approach (1977, p. 31-32).

**Summary**

The factors that most often were associated with apparently permanent abstinence from cigarettes in the present sample were low consumption rates, relatively short smoking histories, and cessation before marriage to a nonsmoker.

A number of the respondents had maintained abstinence for over a year, yet returned to smoking. The factor related to such abstinence usually was pregnancy. Relapse after long-term abstinence frequently was associated with extremely stressful situations.

All but three of the smokers had attempted to stop smoking—usually many times. Relapse after shorter cessations was most frequently associated with cravings.

The constant smokers were not only less likely to stop smoking permanently but were also less likely to maintain abstinence for a year. Relapse was common.

The two relevant dimensions in cessation are motivation and dependence. While most of the smokers in the sample were motivated to stop smoking, only those who were affected
by factors that sustained high levels of motivation or reported low dependency were able to sustain abstinence.

It was suggested that large sample surveys include more detailed smoking histories. If the patterns exemplified by the respondents in the present interviews are typical it appears that permanent abstention is extremely uncommon for long-term constant smokers.
CHAPTER VIII

SUMMARY AND CONCLUSIONS

The purpose of this study was to explore the factors related to cigarette smoking from the perspective of the smokers themselves. Through the use of in-depth, unstructured interviews the four phases in a smoker's history—initiation, transition, maintenance, and cessation—were explored as were the factors that prevented experimentation with cigarettes or transition to regular smoking. Forty-seven men and women with diverse smoking (or nonsmoking) histories and current smoking patterns were included in the sample.

The five previous chapters were devoted to a discussion of the classification of smokers (Chapter III), initiation of smoking (Chapter IV), transition to regular smoking (Chapter V), maintenance of smoking (Chapter VI), and successful and unsuccessful attempts at cessation (Chapter VII).

This final chapter will include a summary of the findings and hypotheses generated, followed by a discussion of the limitations of the study and suggestions for future research.

A number of the findings and conclusions reported have facets that are supported or discussed in the literature on cigarette smoking. The relationships between the current
findings and previous research are addressed in detail in the preceding chapters. In the following summary, it will be noted when the findings are generally consistent or generally inconsistent with those reported in the literature. When the findings represent aspects of cigarette smoking behavior that are not generally reported, the reader should refer to the body of the text for a more complete discussion of the issue.

Findings and Hypotheses Generated

Classification

1. Thirty-two percent of the respondents would have been difficult to classify, or erroneously classified, without in-depth interviews regarding their smoking histories and current smoking status. Individuals who were negative about smoking originally minimized or denied their smoking history. Smokers classified themselves as ex-smokers after brief smoking abstinences. Pipe and cigar smokers did not define themselves as smokers.

It was hypothesized that cross-sectional research which attempts to determine the percentage of smokers, never smokers, and former smokers underestimates the percentage of ever-smokers and overestimates the percentage of ex-smokers.

2. The classification system developed for the present research was based on smoking history, consumption rate, and smoking pattern. It was assumed that the greater the consumption rate, the more regular the smoking pattern, and
the longer the smoking history, the greater the psychological and physiological dependence on cigarettes.

3. Classification system:
   (a) Never smokers: Individuals who never had smoked a single tobacco product.
   (b) Experimental smokers: Individuals who had smoked less than a carton of cigarettes.
   (c) Short-term smokers: Individuals who had smoked with some regularity but ceased smoking in their late teens or early twenties.
   (d) Intermittent smokers: Individuals who smoked sporadically and primarily in social situations.
   (e) Light smokers: Individuals who smoked less than a half-pack of cigarettes a day and rarely smoked in the morning.
   (f) Constant smokers: Individuals who smoked a pack or more of cigarettes a day and smoked consistently throughout their waking hours.

4. Ex-long-term smokers were not included as a separate category. Rather, they were identified by their smoking pattern prior to cessation and the number of years of continuous abstinence. The relapse rate for the long-term smokers suggested that relapse was common after extended abstinences.
Initiation

1. In comparing the reports of the older and younger respondents it was apparent that the sex-role stereotypes regarding smoking had changed dramatically. The older respondents reported that smoking was expected of males and discouraged for females—especially before graduation from high school. In the 1940s, 1950s, and early 1960s, girls who smoked were considered "loose." This usually operated to prevent the females from experimenting with cigarettes in their teens. The younger respondents reported more negative attitudes toward smoking in general, but little differing attitude toward male and female smoking. The younger women in the sample who smoked were more likely to initiate smoking before high school graduation.

The findings do not support the position of researchers (e.g., Baric, 1974; Fisher, 1976; Hill, 1975; Markle & Troyer, 1979) who suggest that females initiate and maintain smoking as a symbol of liberation or in an attempt to emulate males. Rather, the interview data support the position of researchers (e.g., Bossé & Rose, 1976; Dicken, 1978) who suggest that the increase in smoking initiation rates for females was a result of the removal of differential restraints on female smoking which allowed the smoking rates of females and males to converge. The present data also suggest that all that remains of sex differences in cigarette smoking are brand selection (males did not smoke long cigarettes) and certain smoking behaviors (females
avoided smoking while walking and avoided dangling the cigarette from their mouths).

2. An aversion to cigarettes which developed in childhood was cited by some respondents as the factor that prevented experimentation. These respondents usually said that they experienced physical discomfort from tobacco smoke. They all had a parent who smoked. These respondents were also the most likely to cite the health hazards of smoking as a preventative factor.

Respondents who had a negative attitude (as opposed to physical aversion) toward smoking in childhood, yet who eventually became smokers, did not have a parent who smoked.

It was hypothesized that children of smoking parents may, in some cases, be more likely than children of non-smokers to maintain nonsmoking attitudes and intentions because of the behavioral commitment developed in the process of objecting to a parent's smoking.

3. Several of the female respondents cited greater attachment to parents than peers as a factor in preventing experimentation. These women were also more likely to report being shy or more traditional in their values.

It was hypothesized that, because peers are more likely than parents to approve of smoking, individuals who are more isolated from peers due to parental attachment or shyness, are less likely to be exposed to smoking peers and, consequently, less likely to smoke. It is possible, also,
that these findings are related to the lower extroversion scores reported for nonsmokers as compared to smokers (Smith, 1970). Individuals who adhere to traditional values may be more likely to disapprove of smoking peers and thus unlikely to initiate smoking themselves.

4. The respondents--smokers and nonsmokers alike--reported that their parents did not want them to smoke. There appeared to be no tactic employed by parents to prevent smoking that was more effective than another. These findings are commonly reported in the literature on smoking initiation.

5. The smoking status of siblings was not clearly related either to preventing or encouraging smoking initiation for the respondents. No consistent pattern of sibling influence on smoking initiation has been reported in the literature.

6. Awareness of health hazards of smoking did not alone appear to prevent smoking. Both smokers and non-smokers reported being aware of the hazards. This conclusion conforms to the findings in the smoking literature.

7. The older male respondents cited a perceived cultural definition of smoking as an expression of masculinity as the main factor related to smoking initiation. The older female respondents cited a perceived cultural definition of smoking as a polite social behavior (for adult men and women) as the factor related to smoking initiation.
It was hypothesized that for these individuals smoking initiation was more a matter of congruence conformity---the association of individuals with shared values---than peer influence. It was noted that peer influence may be of only ancillary interest in the study of normative behavior.

8. For some of the younger respondents, smoking initiation was related to the shared values of a peer group that smoking was "cool." Overt peer pressure was not reported.

9. The most direct peer influence was evident for respondents who initiated smoking to fit in with a new peer group. Other peer influences were the perceived number of friends who smoked and the shared attributions of friends in a best-friend relationship (unaffected by the smoking behavior of other peers).

10. Overt peer pressure to smoke rarely was reported and then was mentioned only as a factor in the first smoking experience. The individuals who reported overt peer pressure were the least likely to become regular smokers. The individuals who smoked more than a few cigarettes reported few reservations about smoking. Thus, little strain was involved in smoking initiation.

11. Conformity to peer influence on smoking was not related to a general pattern of conformity to peers.

12. For a few smokers, peers played little, if any, role in initiation. These individuals tended to initiate smoking alone and after graduation from high school. They
were most likely to note a similarity between their own and a parent's smoking. Both observational learning of the parent's motives for smoking and classically conditioned positive emotional responses to smoke were hypothesized to be related to initiation in this situation.

It was hypothesized that the smoking pattern of parents plays a more important role if the individual has few smoking peers.

13. One smoker initiated smoking because he believed it would help him to control his weight. It was suggested that the theme in some cigarette advertisements has contributed to this common belief. The images and moods associated with smoking in movies were mentioned more frequently than the images in advertisements. Neither, however, appeared to directly influence smoking initiation.

14. Only a few respondents cited curiosity as a motive for experimentation. These individuals usually did not continue to smoke. It was hypothesized that, for those who continue to smoke, other factors are seen as more compelling explanations for the behavior. Curiosity generally has been cited in the smoking literature as a motive for initiation.

15. Few of the respondents cited rebellion as a factor in initiation. When rebelliousness was mentioned it was described in general terms and was not directed toward particular individuals. It was hypothesized that some teenage behaviors appear rebellious when, in fact, the teenagers
do not define them in that way; conversely, behaviors that the teenager may intend to be rebellious may not be perceived as such by adults. In the literature, rebelliousness has generally been found to be associated with smoking initiation.

Transition

1. As has been suggested in the literature, the longer transition period for individuals who initiate smoking at a younger age was related to the factors that operated to restrict smoking before graduation from high school. The laws restricting teenage smoking and the expense of a regular habit were not found to be major limiting factors. It was hypothesized that school rules against smoking and parental and peer disapproval were so effective in restricting smoking that the laws and expense did not have an opportunity to exert their influence.

2. The influence of school rules and parental and peer disapproval were additive. The more restrictions on smoking, the lower the smoking rate. Peer disapproval was the most influential factor in limiting smoking. Parental approval was the major factor in increasing the likelihood that the teenager would develop a regular smoking habit. Smokers who obtained parental approval for smoking were the most likely to approach their eventual smoking rate while still in high school.

3. Few of the smokers defined themselves as smokers before graduation from high school. Self-definition as a
smoker was associated with the removal of restrictions on smoking which resulted in an increase in consumption. Increased consumption was related to the perception of personal as well as social motives for smoking and the development of a smoker identity.

The older males did not follow this pattern. They perceived a cultural preference for smoking and defined themselves as smokers shortly after initiation.

4. Individuals who initiated smoking after graduation developed a smoker identity shortly after initiation. The lack of restrictions on smoking allowed them to more rapidly achieve their eventual smoking rate. Individuals who initially smoked alone also identified themselves as smokers shortly after initiation. It was hypothesized that this occurred because solitary smokers initially perceived more personal motives for smoking. Individuals who continued to smoke only in groups never defined themselves as smokers.

5. It was hypothesized that individual differences in physical tolerance for cigarettes determined the eventual smoking rate for each individual; consumption rate determined the number of situations and emotional states that would serve as cues for smoking.

**Maintenance**

1. The factors that maintained smoking usually were not the same factors as those related to smoking initiation. This conclusion has gained support in the more recent smoking research.
2. The number of cues for smoking was related to the number of cigarettes smoked; intermittent smokers reported the fewest cues, heavy smokers the most. The lightest smokers were more likely to cite social cues for smoking; the heavier smokers were more likely to associate smoking with dysphoric states and physical cravings. These findings are consistent with the smoking literature.

It was hypothesized that the affective states that become cues for smoking are the states the individual most often experiences. The connection of smoking with the emotional state is a matter of probability. Over time the cues are perceived as motives for smoking.

3. The motives that maintained smoking appeared to be, primarily, the beliefs about the negative consequences of abstention. The most frequently mentioned beliefs were that abstinence would result in greater tension, weight gain, or disruption of cognitive abilities. Physical dependence on cigarettes was cited by most of the smokers as a factor in maintenance.

4. Only three of the respondents denied or minimized the health hazards of smoking. The majority of smokers mollified health concerns by stating an intention to quit or by changing to lower tar and nicotine cigarettes. All but three of the smokers had, at least once, attempted to stop smoking.

5. The smokers tended to believe that smoking was annoying to nonsmokers and most reported that they attempted
to modify their smoking around bothered nonsmokers. Most of the nonsmokers reported being bothered by smoke but did not perceive that smokers attempted to limit their smoking.

It was hypothesized that the different perceptions of the smokers and nonsmokers were due to different perspectives. Nonsmokers tended to expect smokers to demonstrate awareness by completely abstaining in the presence of nonsmokers. Smokers tended to believe that nonsmokers would not be bothered if they kept the smoke away, smoked fewer cigarettes, or refrained as long as they felt was possible.

6. Both smokers and nonsmokers tended to believe that it was incumbent upon the nonsmoker to request abstinence if bothered by cigarette smoke. Many of the nonsmokers were reluctant to do so. These findings are consistent with the recent literature.

It was hypothesized that the antismoking movement which depicts smokers as hostile, disturbed misfits operates to discourage nonsmokers from making polite requests when bothered.

7. In friendships, smokers and bothered nonsmokers tended to modify their attitudes or behavior. Nonsmokers reported less annoyance with friends' than with strangers' smoking. Smokers tended to exert greater effort to abstain or reduce smoking around bothered nonsmoker friends. Both reported that they tended to spend less time together.
Cessation

1. The antismoking movement appeared to have affected the smokers' attitudes and public smoking behavior but not their ability to stop smoking.

2. Sixty-one percent of the smokers had remained abstinent for over a year but 41% then relapsed. Intermittent smokers were the most likely to stop smoking and the most likely to remain abstinent. Constant smokers were the least likely to remain abstinent for a year and were the most likely to relapse.

3. Of the individuals who were ex-smokers at the time of the interviews, all but three were the individuals who stopped smoking in their late teens or early twenties (the short-term smokers). The three long-term smokers had maintained abstinence for one to three years at the time of the interview. Given the high relapse rate after a year or more of abstinence reported by the other long-term smokers it was hypothesized that a longer abstinence was necessary before one could assume that these three smokers had permanently ceased smoking.

4. The factor most commonly associated with successful abstinence was cessation at a young age combined with cessation before marriage to a nonsmoker. The factor most commonly associated with long-term abstinence followed by relapse was pregnancy.
It was hypothesized that permanent cessation for all but short-term intermittent smokers required the operation of some factor that sustained high levels of motivation.

5. Relapse after extended abstinence often was associated with unusually stressful events. Relapse after shorter cessations was associated most frequently with cravings.

It was hypothesized that it may not be particularly strong cues that cause relapse after relatively short cessations but rather the gradual wearing down of resistance that occurs with attempts to maintain abstinence.

6. It was hypothesized that if data on the smoking rate, smoking pattern, and the number of years smoked are included in studies of smoking cessation, few long-term light and constant smokers will be found to have permanently ceased smoking.

A Model for the Development of Smoking Patterns

The respondents' interview data suggested a model for the development of smoking patterns. The model has been presented in stages in Chapters IV through VII. The various stages are here drawn together into a comprehensive model.

The basic assumption of the model is that while social and psychological variables determine who will experiment with cigarettes, physical tolerance for cigarettes is the prime determinant of eventual smoking rate. In addition, the environment in which initial smoking occurs (alone or with peers) affects the rapidity with which the individual
defines him/herself as a smoker and, to some extent, the pattern of smoking. The model in which initiation occurs in association with peers is assumed to be the more common pattern. Individuals who initiate smoking alone differ in that they appear to have more personal value attached to smoking from inception. Such smokers may also be more likely to initiate smoking after graduation from high school.

**Smoking Initiation with Peers**

Smoking is initiated in some type of peer interaction (See figure 1). The individual experiments with cigarettes because he or she has few objections to smoking; thus little strain is involved in initiation. The individual continues to smoke primarily in social situations because the restrictions on teenage smoking allow little opportunity to smoke alone and there is little personal value attached to smoking at this point. This pattern continues until graduation from high school and a move away from home removes the restrictions on smoking. Because the individual no longer is prevented from smoking s/he begins to smoke in a greater variety of situations and consumes more cigarettes. To this point the smoking pattern for individuals who begin smoking with peers is essentially the same. However, at this point the individuals' physical tolerance levels for cigarettes affects the pattern of smoking that will develop.

**Low tolerance.** The individual who has a low tolerance level for cigarettes will feel physical discomfort with
Figure 1. A process model of the development of smoking patterns and factors related to abstinence maintenance for individuals who initiate smoking with a peer or peer group.
increased consumption and will reduce consumption to his/her tolerance level. Because the individual has smoked primarily in social situations before this point s/he will find the strongest cues for smoking in this environment and will continue to smoke primarily in social settings. The physical limitation on consumption rate will prevent the development of additional cues for smoking and will limit the level of physical dependence on nicotine. Because of the low consumption rate and the social nature of the behavior the individual will not define him/herself as a "real" smoker.

The individual will continue to smoke if (1) s/he perceives few health risks because of the low consumption rate, (2) perceives few negative sanctions for smoking and/or (3) is unable to sustain high levels of motivation to stop.

**High tolerance.** The individual who has a high physical tolerance for cigarettes will continue to increase consumption until his/her tolerance level is reached. Because s/he is smoking a larger number of cigarettes, smoking will occur in a greater variety of situations and emotional states. As a matter of probability the affective states the individual experiences most frequently will become the strongest cues for smoking. The individual, observing the frequency of smoking in certain affective states will conclude that these states are not only cues for smoking but, also, motives for smoking (e.g., I smoke because I'm tense).
Observing the frequency of smoking and personal as well as situational cues for smoking, the individual will define him/herself as a smoker. Because of the high consumption rate the individual usually will become physically dependent on nicotine.

The individual who is physically dependent on cigarettes will only be able to stop smoking if s/he is able to **sustain** high levels of motivation. (All high-consumption dependent smokers in the sample who did not relapse after cessation had ceased smoking before marriage to a nonsmoker. Cessation before marriage to a nonsmoker was hypothesized to sustain high levels of motivation).

**Smoking Initiation Alone**

Smoking is initiated alone because the individual has few smoking peers, few objections to smoking, and a belief—learned from a parental or other adult model—that smoking will meet some immediate need (See figure 2). The individual will continue to smoke, primarily, alone. The individual may at this point define him/herself as a smoker because of the personal, as opposed to social, nature of the behavior. When restrictions on smoking are removed the individual will increase consumption rate.

**Low tolerance.** This pattern is similar to that of the low tolerance social smoker except that s/he primarily smokes alone and continues to find the most cues for smoking in this situation. The original motive for smoking (usually tension-reduction) will be maintained. The individual will
Figure 2. A process model of the development of smoking patterns and factors related to abstinence maintenance for individuals who initiate smoking alone.
have few cues and motives for smoking and low levels of physical dependence on nicotine. However, compared to the low-consumption social smoker, this individual will be less influenced by the smoking attitudes and behaviors of others and thus would be less likely to stop smoking unless high levels of motivation are sustained.

High tolerance. The pattern is similar to that of the high tolerance individual who initiated smoking with peers except the individual will define him/herself as a smoker earlier in his/her smoking career.

Limitations of the Study

As is customary with in-depth interviews, the data were obtained from a relatively small sample of individuals. While the sample was diversified it became apparent that there were limitations. The sample was over-represented with more educated individuals. While there appears to be no reason to assume that the pattern of smoking initiation and transition differs for less educated individuals, it is possible that the attitudes toward smoking and social supports for smoking may vary by educational and class groupings. These potential differences need to be explored.

The oldest respondents in the sample were 48 years of age and thus the factors associated with initiation and cessation for older individuals were not examined. All of the male respondents in the sample who had grown up in the 1930s and 1940s had smoked cigarettes, thus the factors that prevented experimentation for males who grew up in a time
when smoking was normative for males could not be explored. Russell (1977) has suggested that the long-term smokers who are most likely to successfully quit smoking are older individuals—particularly those who have diagnosed, or potential health problems attributed to smoking. The process of successful and unsuccessful smoking cessation for these individuals would be an important area for in-depth exploration.

Aside from the sample limitations, it became evident during analysis of the data that the respondents' knowledge of their siblings' smoking behavior had not been fully explored. The respondents reported on the smoking initiation and smoking patterns of their siblings, but it was not always ascertained if the respondents were aware of their siblings' smoking status before they themselves began to smoke. As the smoking status of older and younger siblings can only affect the subject's initiation if s/he knows of the behavior this was a vital, yet omitted, question.

Implications and Suggestions for Future Research

One of the most important implications of the current findings is related to the most basic aspect of smoking research—the determination of the smoking status of the subjects. The interview data suggest that in-depth interviews which include historical data may be necessary to establish the smoking history and current status of a substantial number of individuals. Without this information,
attempts to extract the social, psychological, and physiological factors that affect initiation, transition, maintenance, and cessation will be confounded.

It also is apparent that more detailed information is needed regarding the smoking history of individuals classified as ex-smokers. Specific information on the individual's previous consumption rate, smoking pattern, number of previous abstinences and their duration, and length of smoking history prior to cessation will, when correlated, provide more accurate estimates of the factors related to permanent abstinence.

There is need of more research on the initiation of smoking from the perspective of the teenager. Too many studies have explored the factors the researchers believe are relevant to initiation and too few studies have asked the teenagers themselves what factors influenced their smoking decision. It appears that the variety of peer influences and individual motivations that affect initiation may only be discerned by open-ended interviews of teenagers, or adults who provide retrospective accounts. The term "peer pressure" is too often used, by researchers and subjects alike, to describe a variety of peer influences that actually include little "pressure." The danger of using the term is that it not only may limit our understanding of the dynamics of the interaction but may lead to prevention messages that are simplistic and do not prepare teenagers
for the more subtle types of peer influence they are most likely to experience.

More information also is needed about the individuals who initiate smoking on their own and continue solitary smoking. The motivations involved in this type of initiation appear to differ from those involved in peer initiation. Prevention messages also must address these beliefs.

It is important to note that smoking initiation and transition to regular smoking appeared rather to evolve than to be accompanied by psychological strain or mental calculation of the risks and benefits involved. This finding also has been reported in a recent longitudinal study of the use of a variety of psychoactive substances including cigarettes (Huba, Wingard & Bentler, 1981). As Huba, et al. suggest, it would appear that prevention messages which delineate the risks of smoking will be less effective than those which prepare the individual to defend against initiation influences.

With the exception of the intermittent smoker and the individuals who initiated smoking as a means of tension-reduction or weight-control, the factors that influenced initiation were not the same as those that maintained smoking. As most of the smokers had attempted to stop smoking, and wished they did not smoke, it seems clear that they did not continue because they, as adults, believed smoking to be socially attractive or sophisticated behavior. The smokers continued primarily because they were unable to
abstain, were concerned about the consequences of absten-
tion, or believed immediate personal needs were met by
smoking. Intervention messages which assume that the fac-
tors involved in initiation are the same factors that main-
tain smoking may be so discrepant from many smokers'
experiences that they have little impact.

The transitional period from experimentation to regular
smoking is an important area for further exploration.
Retrospective accounts provide a great deal of valuable
information but should be compared with the results of
longitudinal studies which follow subjects as they are in
the process of transition. Both retrospective and longi-
tudinal methods have potential limitations. Retrospective
accounts may be subject to memory distortions and lapses.
Longitudinal methods potentially affect the behavior being
studied. However, comparisons of the accounts gathered from
each method will help to delineate the relevant variables
and suggest areas for further study.

Finally, the relapse rate for the long term smokers
suggests that permanent abstinence may be more uncommon than
even the current discouraging estimates imply. The inabil-
ity of the smokers in the sample to maintain abstinence
despite repeated attempts suggests that the most important
factor in maintenance is, as Russell (1977) suggests, the
physiological dependence. His recommendation for the
development of a low tar and medium nicotine cigarette may
be the most practical immediate intervention for addicted smokers.

While a study of this nature has its primary purposes in the in-depth description of a phenomenon, in the culling of broad patterns from the data collected and the generation of hypotheses valuable for future research, there are also some findings which yield more immediate, direct application.

The findings regarding transition to regular smoking point to the value of continuing restrictions on smoking both in the larger environment (e.g., the schools) and in the home. Concerns that such restrictions might foster rebellion, and thus encourage smoking, do not appear to be supported by the interview data.

While parental restrictions on smoking force the child to hide the behavior and thus produce what some parents consider to be dishonesty, the restrictions appear to extend the period before psychological and physical dependence on cigarettes makes cessation unlikely. Given the potential health hazards of smoking, delaying the onset of dependent smoking and thus extending the period for intervention ultimately may be of greater value.

Illustrative cases which present the attitudes and feelings of smokers and nonsmokers could prove useful in the emerging smoker/nonsmoker conflict. There is potential value for each side in learning of the feelings of the others—feelings expressed in a non-threatening,
non-confrontive situation. Empathy and understanding of the others' point of view are more likely to lead to rational, amicable solutions than are simplistic attributions which create hostilities.

**General Implications of the Findings**

A preceding section detailed the heuristic value of the present study specifically for research on smoking, but there are implications for other areas of behavioral research as well. Some of these will be touched upon here.

Perhaps the most potentially valuable broad implication to be drawn relates to methodology. There is a tendency in psychology to automatically approach many phenomena via experimentation. However, the present in-depth unstructured methods yield a type of data not possible in studies which focus on a few variables pre-selected by the researcher. Use of this in-depth approach can help to define the most profitable areas of investigation as well as reveal possible interrelationships and processes worthy of further exploration by other methods. Details of the value of the method have already been described (see Chapter II) and will not be repeated here; but the favorable results in clarifying numerous aspects of influences, attitudes, and behavior related to smoking show it to be an extremely valuable method, relevant across a wide spectrum of behavioral phenomena.

Information from particular illustrative cases also may provide fresh insights into social learning. For example,
it has long been reported that children with one or more parents who smoke are more likely to become smokers themselves; a general statistic does not reveal the different paths to smoking or non-smoking as they are affected by the smoking status of the parent(s). Some of the variety which the statistic alone overlooks comes out of the interview data which have been reported here.

1. For those subjects who initiated smoking alone, outside a peer group, it appeared that what was learned most directly from smoking parents was a motive for smoking (e.g., from a parent's claim that smoking reduces tension).

2. Where there is separation from a parent or parental figure, smoking may be adopted as a kind of substitute for that person or as a stimulus which evokes the feelings associated with that parent. (This appeared to be the situation in two of the cases presented in Chapters III and IV).

3. Some smoking parents actually may provide a "negative" influence when children suffer physical discomfort from tobacco smoke. Alternatively, as noted earlier in this chapter, smokers with negative attitudes but no physical aversion to smoking in childhood did not have parents who smoked.

4. Furthermore, since the first report of a statistical relationship between smoking and having parents who smoke, there has been a substantial increase in educational campaigns which have spurred some children to "nag" their
parents about their smoking. Children who adopt this attitude are less likely to become smokers, perhaps because of the early verbal commitment which they have made.

What is demonstrated here is that there are at least several different patterns of parental influence on smoking initiation. It seems likely that various patterns of social learning also could be identified in other areas of research using a methodology which would permit them to surface.

The results described here also show the necessity of periodically up-dating research in an area where changing cultural norms or changing sex roles are likely to be factors of importance. It appears, for example, that increased smoking among women is largely attributable to the removal of restraints. Further, when smoking is viewed as a cultural norm (as it once was for males) the influence of the immediate peer group is of relatively less significance than when smoking is not as widely approved. There is little doubt, for example, that the health consequences of smoking have increased in importance, affecting initiation and cessation attitudes, in the years since the Surgeon General's report first brought them to wide, public attention. Thus, whenever broad cultural or sex role standards change, previous research findings may have limited relevance. This is doubtless as true of other areas as it is proving to be in smoking research.

Finally, the conflict the smokers reported over their smoking speaks to the treatment of addictions and
dependencies in general. Social pressure and aversive social control techniques may be valuable in discouraging initiation. However, such techniques may only serve to increase guilt while doing little to aid cessation for those who already are dependent. The factors maintaining addictions and dependencies may have less to do with the personalities of the addicts or the pleasure derived from the behavior and more to do with the lack of effective abstinence maintenance techniques.

**Conclusion**

The in-depth unstructured interview method employed in this research proved a valuable tool for an exploration of the process aspects of cigarette smoking. Employing a very different methodology than previously has been used in the study of cigarette smoking led to findings which supported the results from other methodologies in some cases and suggested alternative hypotheses in others.
APPENDICES
APPENDIX A
SUMMARY OF SUBJECT DEMOGRAPHIC DATA

Sample:
26 Females
21 Males
47 Total

Age Range:
18-48

Marital Status:
17 Single
21 Married
8 Separated/Divorced
1 Widow

Education:
3 Ph.D.
4 M.A.
16 B.A.
24 H.S.

Place of Residence:
21 Southern California
1 Midwest
25 New England

Occupations:
College student (12)
Graduate student (3)
Homemaker (6)
Teacher (4)
Professor (3)
Firefighter (2)
Secretary (2)
Manager (2)
Dean
Advisor
Health care administrator
Photographer
Clerk/typist
Medical records
Technician
Food service
APPENDIX B

OUTLINE OF INTERVIEW QUESTIONS

I. Demographic
   A. Name
   B. Age
   C. Marital status
   D. Marital history
   E. Occupation – present
      1. How long
   F. Education
   G. Where grew up
   H. Where live now
   I. Spouse
      1. Age
      2. Occupation
      3. Smoking status
      4. Cessation attempts
      5. Attitude toward smoking
   J. Children
      1. Sex and age
   K. Others in household
      1. Smoking status

II. Smoking Status
   A. Number smoked per day/week
   B. Brand/length
   C. Inhale?
   D. Buy by pack or carton
   E. Do you wish you weren't a smoker
      1. What would have prevented you from starting
      2. What would have had to have been different
         for you not to become a smoker

III. Parents
   A. One or two parent home
      1. If one-parent, when
      2. Step-parent
      3. How often saw absent parent
      4. Extended family and smoking status
   B. Mother
      1. Smoking status while growing up
      2. Smoking status now
      3. Cessation attempts
      4. General attitude toward smoking – then/now
      5. Attitude toward your smoking – then/now
      6. Comments on smoking before you started
      7. Education
      8. Occupation while you were growing up
      9. When was she most likely to smoke
10. Your attitude toward mother while growing up
11. How strict/trusting
12. Religion

C. Father
   1. Smoking status while growing up
   2. Smoking status now
   3. Cessation attempts
   4. General attitude toward smoking - then/now
   5. Attitude toward your smoking
   6. Comments on smoking before you started
   7. Education
   8. Occupation while you were growing up
   9. When was he most likely to smoke
10. Your attitude toward father while growing up
11. How strict/trusting
12. Religion

IV. Siblings
   A. Ages and sex
   B. Smoking status of each before you started
   C. Smoking of each now

V. First Smoking Experience
   A. Age
   B. Who with
   C. Situation
   D. Feelings - did you enjoy it
   E. Where got the cigarette
   F. List others you knew who smoked at this point
   G. Any film heroes smoke at this time that you remember

VI. Subsequent Smoking - Transitional
   A. How long after first experience
   B. Situations
   C. Who with - list
   D. How often
   E. Who all did you know that smoked - list
   F. Where got cigarettes
   G. When did parents find out - their reaction
   H. What did you think of others who smoked - general/boys/girls/men/women
   I. Did you practice your smoking style
   J. Why quit (if experimental smoker)
   K. Were you aware of the health hazards
   L. For ex-smoker- How aversive do you find others smoking

VII. Habituation
   A. When defined self as smoker
   B. Situations where smoked
   C. How often
   D. Who all smoked - list
   E. Did you think you would always smoke
VIII. School - High School
   A. Age compared to others in same grade
   B. Attitude toward school
   C. College prep or not
   D. Grades
   E. Activities in school
   F. School rules on smoking
   G. Teachers who smoked
   H. Any anti-smoking programs

IX. Work - Precollege
   A. Age first had a job
   B. Subsequent jobs
   C. Rules on smoking
   D. Who smoked
   E. When smoked at work

X. College
   A. Major
   B. Grades
   C. Activities
   D. School rules on smoking
   E. Professors who smoked

XI. Work - College to present
   A. Positions held
   B. Rules on smoking
   C. When smoke
   D. Attitude toward work
   E. Who smokes - list
   F. How many days absent from work per year

XII. Present Smoking
   A. Situations when smoke
   B. Places where smoke
   C. People smoke with
   D. People you know who smoke
   E. Stated reasons
   F. Physical symptoms - negative/positive
   G. Situations where don't smoke
   H. Cues (music, etc.)
   I. How do you think your smoking affects others
      1. Are you concerned/ how dangerous is your smoke
         to others/ how annoying
   J. How does others' attitude affect your smoking
   K. Do you feel you (people) have a right to smoke
      when they please

XIII. Cessation Attempts
   A. When
   B. How long quit
   C. Why started again - situation
   D. Doctor ever tell you to quit or cut down
E. When think of quitting - positive effects/
negative
F. What techniques did you use to quit (cold turkey/
   enlist help/tell friends)
G. Was it difficult
H. Who around you had quit
I. Were you in a smoking environment before/during/
   after

XIV. Life Style
A. Leisure time activities
B. Exercise
C. Diet
D. Hospitalizations
E. Religion - views of your church on smoking

XV. General Attitudes and Beliefs
A. What needs are satisfied for you by smoking
B. Do you think about the health risks
C. Estimate percent of smokers - general/male/female
D. Estimate the percent who have quit - general/male/
   female
E. What are the health hazards of smoking
   1. Are they different for males and females
   2. Are they different depending upon kind of
      cigarette smoked
F. Do you know anyone who has died of cigarette
   related illness
G. Attitude toward your children smoking
H. Attitude toward non-smokers rights groups
I. Attitude toward cigarette companies
J. Attitude toward alcohol
K. Did you consider yourself rebellious as a
   teenager

XVI. Smoking Habits - Observational
A. Inhale
B. How held
C. Out through nose
D. Front vs. side of mouth
E. Smoke while walking
F. Flick ashes
G. Leave in mouth
H. Exhale while in mouth
I. How light up
J. Cigars and pipes
APPENDIX C
CONSENT STATEMENT

This is an exploratory study on cigarette smoking. I am interviewing people who have smoked cigarettes, as well as people who have never smoked in an attempt to understand how people become cigarette smokers and why they do or do not continue to smoke.

The questions that will be asked during the interview are about cigarette smoking. I am interested in your feelings about smoking and your own smoking behavior if you smoke or have ever smoked. I will also ask some questions about the smoking habits of your parents, siblings, and friends.

Although none of the questions are embarrassing or very personal, please remember that you do not have to answer any question I ask. You may decline for any reason whatsoever. Moreover, you may discontinue the interview anytime you wish.

In accordance with the guidelines set forth by the Department of Health, Education and Welfare for research employing human participants, I will need your signature to indicate that you consent to participate. However, before signing it is important that you know that neither your name nor any other identifying information will ever be associated with the information you give. This consent form will be kept separate from the interview information and will be available to no one but myself.
INFORMED CONSENT

I understand that the purpose of this study is to examine factors related to cigarette smoking.

I confirm that my participation as a subject is entirely voluntary. No coercion of any kind has been used to obtain my cooperation.

I understand that I may withdraw my consent and terminate my participation at any time during the investigation.

I have been informed of the procedures that will be used in the study and understand what will be required of me as a subject.

I understand that neither my name nor any other identifying information will be associated with the results of this study should it be published.

I wish to give my cooperation as a subject.

Signed: _______________________

Date: ________________________
APPENDIX D

SUBJECT PROFILES

Never Smokers

Martin (18) - Martin is single and lives in the Southwest with his mother and two siblings. His mother never has smoked. His father smokes a pack of cigarettes a day.

Lisa (19) - Lisa is single and lives in Southern California with her parents and three siblings. Her mother has abstained from cigarettes since Lisa was seven. Her father abstained from smoking when Lisa was from 7 to 14 years old. One sibling has experimented with cigarettes.

Marian (20) - Marian is single and lives in New England in a college dorm. Her mother smokes a pack of cigarettes a day. Her father has abstained from cigarettes since before she was born.

Karen (20) - Karen is single and lives in New England with her boyfriend. (See Experimental Smoker Bobby-21) Her mother never has smoked. Her father smokes a pipe and cigars daily. Two older siblings smoke.

Janelle (21) - Janelle is single and lives in New England in a college dorm. Her mother smokes on rare occasions. Her father smokes a half-pack of cigarettes a day--off and on. Six older siblings smoke.

Travis (24) - Travis is single and lives in New England in a college dorm. His mother smokes over a pack of cigarettes a day. His father smokes three packs of cigarettes a day. One younger sibling smokes.

Paula (25) - Paula is married and lives in Southern California with her husband and two small children. Her husband never has smoked. Her mother never has smoked. Her father smokes a pack of cigarettes a day. One older sibling smokes.
Never Smokers - continued

Lance (31) - Lance is married and lives in the Midwest with his wife and three small children. His wife had experimented with cigarettes in college. His mother smokes over a pack of cigarettes a day. His father has abstained from cigarettes since before Lance could remember. (See Chapter III)

Lester (33) - Lester is divorced and lives in Southern California. He has two nonsmoker roommates. His mother has abstained from cigarettes since Lester was 27. His father never smoked. His ex-wife had smoked for a brief period when he was overseas. Update: smoking status unchanged.

Experimental Smokers

Ellen (19) - Ellen is single and lives in New England in a college dorm. Her mother never smoked. Her father smokes a pipe once a year at Christmas. Two older siblings smoke. Ellen smoked a cigarette when she was in the fourth grade. For a year she has been smoking a pipe, once a month.

Nora (20) - Nora is single and lives in New England in a college dorm. Her mother and father never have smoked. One younger sibling has experimented with cigarettes. Nora smoked once in eighth grade and once a week for two months in ninth grade.

Vera (21) - Vera is single and lives in Southern California with her parents and two younger siblings. Her mother never has smoked. Her father smokes an occasional cigarette and pipe. One older sibling smokes. Vera smoked a cigarette when she was six and smoked every few months when she was 13 to 15 years old.

Bobby (21) - Bobby is single and lives in New England with his girlfriend (See Never Smoker Karen-20). His mother has abstained from cigarettes since before he remembers. His father has abstained since Bobby was eight. Bobby smoked occasionally in eighth grade, in tenth grade and in his second year of college. He now smokes a pipe two to three times a week.
Drake (24) - Drake is married and lives in New England with his wife. She never has smoked. His mother has abstained from cigarettes since he was six. His father smokes cigarettes, cigars and a pipe. One older sibling smokes. Drake smoked a cigarette when he was 12 and smoked on occasion throughout junior and senior high school.

Sandra (25) - Sandra is married and lives in New England. Her husband smoked but has abstained since before they were married. Her mother and father smoked. Sandra smoked once when she was in third grade.

Judy (31) - Judy is separated from her husband and lives in a college dorm in New England. Her husband never smoked. Her mother smokes two to three packs of cigarettes a day. Her step-father (since she was 14) smokes less than a pack a day. Her father has abstained since Judy was 14-years-old. Her step-mother is a nonsmoker. Judy experimented with cigarettes a few times when she was 14 and once when she was in college.

Sylvia (36) - Sylvia is married and lives in New England with her husband (See Short-term Smoker David-35) and three children. Her mother never has smoked. Her father smokes a pack of cigarettes a day. Sylvia smoked a cigarette when she was 12 and experimented a few times in high school and college. Update: smoking status unchanged.

Sally (38) - Sally is divorced and lives in Southern California with her teenage daughter. Her ex-husband was a smoker. Her mother never smoked and her step-father was a light smoker. Sally smoked a few times after she was married, when she was 19. Update: smoking status unchanged.

Mae (48) - Mae is married and lives in New England with her husband (See Short-term Smoker, Raymond-48) and daughter. Mae's mother never smoked. Her father smoked three packs a day. Mae smoked a cigarette once after she was married. Update: smoking status unchanged.
Short-term Smokers

Roy (19) - Roy is single and lives in Southern California with his father. His father smokes cigars daily. Roy smoked several times in first through third grades, in ninth grade and occasionally in twelfth grade through his first year of college. He never defined himself as a smoker and never inhaled. Update: has not resumed smoking.

Richard (24) - Richard is single and lives in a college dorm in New England. His mother never smoked. His father has abstained since Richard was five. Two older siblings smoked. Richard started smoking in his senior year of high school and smoked through his junior year of college. He never defined himself as a smoker. (See Chapter III)

Ralph (32) - Ralph is divorced and lives in Southern California with a nonsmoker roommate. His ex-wife abstained from smoking after they were married. His mother smokes less than a pack a day. His father smokes two packs a day. Ralph smoked periodically in junior and senior high school and his first year of college. He never defined himself as a smoker.

Don (32) - Don is divorced and lives alone in New England. His ex-wife smoked over a pack of cigarettes a day. His mother has abstained from cigarettes since Don was 13. His father has abstained since Don was seven. Don experimented with cigarettes at 11 and increased his smoking when he joined a gang at 13. He reduced his smoking in sports at ages 15 to 18. Don continued to smoke a half-pack a day until his second year of graduate school. He has abstained for nine years.

Belle (34) - Belle is divorced and lives in Southern California with her small son and a roommate. Her mother never smoked. Her father has abstained from cigarettes since Belle was 13. Belle started smoking in her junior year of college and smoked for two and one-half years. She smoked two packs a day at her peak. She ceased smoking before she married her nonsmoker husband. Update: still a nonsmoker.
Short-term Smokers - continued

David (35) - David is married and lives in New England with his wife (See Experimental Smoker Sylvia-36) and three children. David's mother never smoked. His father smoked until he died when David was 12. One older sibling smoked. David smoked a cigarette in second grade. He experimented periodically from fifth grade on. He smoked primarily on weekends until his senior year of college. He smoked regularly during his first two years of graduate school. He has had a few brief relapse periods since he ceased smoking. Update: has not relapsed in three years.

Keith (47) - Keith is a widower and lives in Southern California with his daughter--a nonsmoker. His wife was a constant smoker. His mother never smoked. His father smokes. Keith started smoking in eighth grade and continued until two years after graduating from high school. He smoked a pack a day for a brief period. He has smoked an occasional cigarette and cigar since abstaining. Update: smoking status unchanged.

Raymond (48) - Raymond is married and lives in New England with his wife (See Experimental Smoker Mae-48) and daughter. His mother never smoked. His father was a regular cigar smoker. One older sibling smoked. Raymond started smoking in his junior year of high school and continued through his first year of college. He smoked over a pack a day at his peak.

Intermittent Smokers

Betty (27) - Betty is single and lives alone in Southern California. Her mother never smoked. Her father smoked intermittently. Betty smoked a cigarette when she was 13 and may have had a few cigarettes in high school. She started smoking when she was 21 and continues to smoke intermittently. At the time of the interview she had abstained for one month.
Intermittent Smokers - continued

Bess (33) - Bess is married and lives in New England with her husband and daughter. Her husband was an intermittent smoker but has abstained for two years. Her mother never smoked. Her father smoked a pack of cigarettes a week. One older sibling smoked intermittently. Bess started smoking in the ninth grade and continued to smoke intermittently. She has abstained for over a year. Before that she had several long abstinence periods.

Audrey (34) - Audrey is married and lives in Southern California with her husband and two small children. Her husband is also an intermittent smoker. Her mother never smoked. Her father smoked cigars. Three older siblings smoked. Audrey smoked a cigarette in eighth grade. She started smoking in her freshman year of college. She usually smokes two to three cigarettes a day when she smokes. Two abstinence periods: one and a half years (pregnant) and seven months. (See Chapter III)

Light Smokers

Karla (18) - Karla is single and lives in Southern California with her parents and a sister. Her mother is a light smoker. Her father smoked cigarettes before Karla was born and smoked cigars when Karla was 10. One older sibling smokes. Karla started smoking in the summer before tenth grade. She smokes about one-half pack a day. Update: unchanged.

Sarah (21) - Sarah is single and lives in New England with her brother, a nonsmoker. Her mother smoked until Sarah was 14. Her father smoked until she was 15. Two older siblings smoked. She smoked a cigarette when she was 10. She started smoking when she entered eighth grade. She now smokes one-half pack a day. Two abstinence periods: two months and three weeks.

Joan (28) - Joan is married and lives in New England. Her husband has abstained from cigarettes for one year. Her mother has been an ex-smoker since Joan was 18. Her father smokes. One older sibling smokes. Joan smoked a
Light Smokers - continued

Cigarette when she was six years old and again when she was 12. She started smoking the summer after she graduated from high school. She is trying to smoke less. Her smoking varies but she averages one-half pack a day now. Update: now an ex-smoker - has abstained for one and a half years--since she became pregnant.

Cathy (35) - Cathy is married and lives in Southern California with her husband and two young children. Her husband smokes. Her mother smoked until Cathy was 31. Her father smokes. One older sibling smoked. Cathy smoked a cigarette when she was 14. She started smoking when she was 15. She smoked about one-half pack a day. She now has puffs of her husband's cigarettes on occasion. Two abstinence periods: eight months (pregnant) and 18 months (pregnant). Update: has returned to one-half pack a day.

Constant Smokers

Nina (22) - Nina is married and lives in New England with her husband and one child. Her husband never has smoked. Her mother has been an ex-smoker since before Nina was born. Her father has been an ex-pipe smoker since before she was born. One older sibling smoked but has abstained for six months. Nina smoked rarely until her sophomore year of college. She now smokes between one and two packs a day. One abstinence period: nine months (pregnant).

John (25) - John is married and lives in Southern California with his wife who is a light smoker. His parents never smoked. Two younger siblings smoke. John started smoking when he was 14. He now smokes over a pack a day. Update: divorced--smoking pattern unchanged.

Havana (27) - Havana is divorced and lives in New England. His ex-wife never smoked. His mother never smoked, but his father smoked a pipe. One older sibling smokes. He smoked a cigarette when he was nine. He started smoking cigars and then cigarettes during his first year of
Constant Smokers - continued

college. He currently smokes a pack a day.
One abstention period: one year.

Tim (27) - Tim is married and lives in New England. His
wife is a light smoker. His mother smokes
two to three packs a day. His father smokes
cigars. Two older siblings and one younger
sibling smoke. Tim smoked a cigar when he
was five and a cigarette when he was 12. He
started smoking when he was 14. He now
smokes over a pack a day and inhales 45% of
the time. Four abstention periods: one
month, four months, six months, one month.

Maggie (31) - Maggie is married and lives in Southern
California with her husband and two children.
Her husband never has smoked. Her mother,
father and step-mother never smoked. Three
older siblings are now ex-smokers. Maggie
started smoking in eighth grade. She smoked
a pack a day but has been an ex-Constant
Smoker for over three years. (See Chapter
III)

Rick (32) - Rick is single and lives alone in Southern
California. His mother is an intermittent
smoker. One younger sibling smokes. Rick
experimented with cigarettes several times
when he was 12. He started smoking his
first year in college. Rick now smokes over
a pack a day. Update: smoking status
unchanged.

Ted (32) - Ted is single and lives alone in Southern
California. His parents never smoked. One
older sibling smoked. Ted started smoking
in his junior year of college. He now smokes
one and one-half pack a day. Three abstention
periods: three years, five months,
four months. Update: smoking status
unchanged.

James (32) - James is married and lives in New England.
His wife never has smoked. His mother and
step-father smoke two to three packs a day.
James started smoking when he was 17, in the
military. Now smokes two to four packs of
unfiltered cigarettes a day.
Constant Smokers - continued

Brian (33) - Brian is married and lives in Southern California with his wife and baby. He lived with his aunt and uncle until he was 13 and his uncle smoked. His mother never smoked and his step-father was an ex-smoker. Two older siblings smoke. Brian started smoking when he was 13. He now smokes two packs a day. One abstinence period: three weeks. Update: smoking status unchanged. (See Chapter III)

Joyce (37) - Joyce is divorced and lives in Southern California with her two children. Her ex-husband smoked. Her mother never smoked but her father smokes. One younger sister smokes. Joyce started smoking in her senior year of high school and she now smokes a pack a day. Abstinence periods: eight months (pregnant), three years. Update: smoking status unchanged.

Jane (38) - Jane is married and lives in New England with her husband and three children. Her husband smokes. Her mother never smoked. Her father has been an ex-smoker since Jane was 13. One younger sibling smoked. Jane started smoking when she was 16. She now smokes two packs a day. Two abstinence periods: five years, three months. Update: smoking status unchanged but husband is now an ex-smoker.

Denise (43) - Denise is married and lives in Southern California with her husband and two children. Her husband has been an ex-smoker since before they met. Mother smoked occasionally. Father smoked cigars and cigarettes. One older sibling smoked occasionally. Denise started smoking in her freshman year of college. She now smokes over a pack a day. One abstinence period: three months. Update: smoking status unchanged.

Jay (45) - Jay is married and lives in New England with his wife and one child. His wife smokes one pack a day. His mother and step-father never smoked. Two younger siblings smoke. Jay smoked a cigarette when he was 12. He started smoking when he was 17. He now smokes two to two and one-half packs a day.


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