

1-1-2001

## The experience of successful smoking cessation: A phenomenological inquiry

Gail Ann Rattigan  
*University of Nevada, Las Vegas*

Follow this and additional works at: <https://digitalscholarship.unlv.edu/rtds>

---

### Repository Citation

Rattigan, Gail Ann, "The experience of successful smoking cessation: A phenomenological inquiry" (2001). *UNLV Retrospective Theses & Dissertations*. 1259.  
<http://dx.doi.org/10.25669/rxq1-08qt>

This Thesis is protected by copyright and/or related rights. It has been brought to you by Digital Scholarship@UNLV with permission from the rights-holder(s). You are free to use this Thesis in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Thesis has been accepted for inclusion in UNLV Retrospective Theses & Dissertations by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact [digitalscholarship@unlv.edu](mailto:digitalscholarship@unlv.edu).

## INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

**The quality of this reproduction is dependent upon the quality of the copy submitted.** Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning  
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA  
800-521-0600

UMI<sup>®</sup>



**THE EXPERIENCE OF SUCCESSFUL SMOKING CESSATION:**

**A PHENOMENOLOGICAL INQUIRY**

by

**Gail Ann Rattigan**

**Bachelor of Science  
University of Wisconsin-Milwaukee  
1975**

**A thesis submitted in partial fulfillment  
of the requirements for the**

**Master of Science Degree  
Department of Nursing  
College of Health Sciences**

**Graduate College  
University of Nevada, Las Vegas  
May 2001**

UMI Number: 1405116



---

UMI Microform 1405116

Copyright 2001 by Bell & Howell Information and Learning Company.

All rights reserved. This microform edition is protected against  
unauthorized copying under Title 17, United States Code.

---

Bell & Howell Information and Learning Company  
300 North Zeeb Road  
P.O. Box 1346  
Ann Arbor, MI 48106-1346



## Thesis Approval

The Graduate College  
University of Nevada, Las Vegas

December 12, 2000

The Thesis prepared by

Gail Rattigan

Entitled

"The Experience of Successful Smoking Cessation: A Phenomenological Inquiry."

is approved in partial fulfillment of the requirements for the degree of

Masters of Science in Nursing

Auan Keanuaki

Examination Committee Chair

Dean of the Graduate College

Auan R. Michael

Examination Committee Member

Sue Witt

Examination Committee Member

Richard D. Tandy

Graduate College Faculty Representative

## **ABSTRACT**

### **The Experience of Successful Smoking Cessation: A Phenomenological Inquiry**

by

Gail Ann Rattigan

Dr. Susan Kowalski, Examination Committee Chair  
Assistant Professor of Nursing  
University of Nevada, Las Vegas

Cigarette smoking is a significant public health issue and despite efforts, prevalence of smoking has not decreased in accordance with national goals. This study utilized a phenomenological approach to describe women's experience of successful smoking cessation. Pender's Health Promotion Model (1996) and Prochaska and DiClementes' Transtheoretical Model of Change (1996) were utilized. Twelve women who had successfully quit smoking were interviewed.

Data analysis yielded a core theme of transformation to non-smoker. Sub-themes included motivational factors of image conflict and cues for action. Other themes included barriers to cessation and coping mechanisms. Interpersonal factors and unconditional resolve were influential. Activity-related affect included grief and loss during cessation and joy and fulfillment upon success.

Both models and existing research were supported. New insight into smoking cessation was gained. The importance of advice to quit by health care providers was supported. Additional research was recommended.



## TABLE OF CONTENTS

ABSTRACT .....	iii
ACKNOWLEDGMENTS .....	viii
CHAPTER 1 INTRODUCTION .....	1
Summary .....	4
CHAPTER 2 REVIEW OF LITERATURE .....	5
Qualitative Studies .....	5
Relevant Quantitative Studies .....	10
Correlates in Women .....	13
Summary .....	14
CHAPTER 3 THEORETICAL FRAMEWORK .....	16
Theoretical Basis For The Health Promotion Model .....	17
The HPM and Related Concepts .....	17
Individual characteristics and experience .....	18
Behavior-specific Cognitions and Affect .....	18
Stages of Change Model .....	21
Precontemplation .....	21
Contemplation .....	21
Preparation .....	22
Action .....	22
Maintenance .....	22
Research Questions .....	23
Assumptions .....	23
Summary and Application .....	23
CHAPTER 4 METHODS AND PROCEDURES .....	25
Introduction .....	25
Method .....	25
Definitions .....	26
Sample .....	27
Procedure .....	28
Ethical Consideration .....	28

Data Analysis .....	29
Memoing .....	29
Coding .....	30
Coding Reliability .....	30
Vignettes .....	30
Data Display .....	31
Identifying Patterns and Themes .....	31
Methodological Rigor .....	32
Checking For Representation .....	33
Checking For Research Effects .....	33
Getting Feedback From Informants .....	34
Summary .....	35
 CHAPTER 5 FINDINGS .....	 36
Demographics and Smoking History .....	36
Transtheoretical Model of Change .....	37
Precontemplation .....	37
Contemplation .....	38
Preparation .....	42
Action .....	43
Maintenance .....	47
Pender's Health Promotion Model .....	49
Prior Related Behavior .....	50
Personal Factors .....	50
Perceived Benefits of Action .....	51
Perceived Barriers to Action .....	53
Perceived Self-Efficacy .....	54
Activity-Related Affect .....	54
Interpersonal Influences .....	55
Situational Influences .....	57
Commitments to a Plan of Action .....	57
Immediate Competing Demands and Preferences .....	58
Additional Themes .....	58
Summary .....	59
 CHAPTER 6 DISCUSSION .....	 61
Summary of Major Themes .....	61
Discussion .....	62
Relationship of Findings to Stages of Change .....	62
Relationship of Findings to Pender's Health Promotion Model .....	63
Relationship of Findings to Smoking Cessation Literature .....	66
Conclusions .....	68
Study Limitations .....	69
Implications For Practice .....	70
Recommendations For Further Study .....	71

REFERENCES .....	72
APPENDICES	
Appendix A: Figures .....	78
Appendix B: Tables .....	81
Appendix C: Data Collection Tools .....	85
Appendix D: Human Consent Forms .....	87
Appendix E: Permission to Use Pender's Revised Model .....	92
VITA .....	94

## ACKNOWLEDGMENTS

I would like to recognize the many individuals whose assistance was invaluable in the completion of this work. Foremost, I would like to thank my Thesis Committee Chairperson, Dr. Susan Kowalski for her expert counsel and for keeping me on track. Additionally, I am grateful to the other members of my Thesis Committee: Dr. Susan Michael for sharing her expertise in qualitative research, Sue Witt for her thoughtful editing and comments and Dr. Dick Tandy for considering the possibility that numbers are not the only avenue to enlightenment. I am also indebted to Dr. Elizabeth Fildes for her valuable input and referral of study subjects. I appreciate the Zeta Kappa Chapter of Sigma Theta Tau and Dr. Jim Christensen for their financial support of my research. Furthermore, I am grateful to Eileen Gemmel, my classmate and friend for her moral support. I am thankful to Maureen Puskar, whose work sparked my interest in qualitative research, for her encouragement and advice. I thank all the women who willingly shared their experience of smoking cessation and applaud their courage and fortitude.

Finally, I am forever grateful to my husband Chip and sons, Sean and Nicholas, for their patience and for giving me strength. You are my *raison d'être*.

## CHAPTER 1

### INTRODUCTION

Cigarette smoking remains the leading preventable cause of death and disability in the United States. Smoking-related morbidity includes increased risk of cardiovascular disease, lung cancer, other cancers, stroke, and chronic lung disease (Nelson, 1990). One in six deaths can be attributed, at least in part, to smoking (U.S. Department of Health and Human Services [ U.S. DHHS], 1990). The impact of smoking-related mortality has been compared to "two jumbo jets crashing every day in the United States with no survivors among the 1,000 passengers" (Fiore, Pierce, Remington, & Fiore, 1990 p. 187). Smoking hazards specific to women include impaired fertility and an increased incidence of cervical cancer (U.S. DHHS, 1990). Smoking during pregnancy is associated with increases in low infant birthweights, prematurity, miscarriage, stillbirth, sudden infant death syndrome, and increased infant mortality (U.S. DHHS, 1990). Furthermore, exposure to environmental smoke increases morbidity in healthy non-smokers, including children of smokers (U.S. DHHS, 1990). Significant health risks attributable to second hand smoke in children include increased incidence and severity of asthma, lower respiratory infections and otitis media. Children of smokers are more likely to be hospitalized during their first year of life and may develop chronic airflow obstruction later in life (U.S. DHHS, 1990). Passive smoking has also

been linked to decreased cognitive ability (Bauman and Flewelling, 1991). Children, especially girls, are more likely to smoke as adults if their mothers smoke (Kandel, Wu, & Davies, 1994).

The Surgeon General's initial report related to the hazards of smoking in 1964 precipitated a decline in smoking rates. By 1993, the prevalence of smoking in the United States had dropped from 50% to 27.7% in adult males, and from 30% to 22.2% in adult females (Hymowitz, Lynn, Mueller, & Thompson, 1995). The relatively small decrease in smoking prevalence among females has been attributed to the changing roles of women and the marketing strategies of tobacco companies (Fiore, Novotny, Pierce, Patel, Haziandreu, & Davis, 1989). Despite the decline in prevalence since the 1960's, smoking continues to present a major health risk with nearly one third of adults in the United States continuing to smoke (U.S. DHHS, 1990).

In 1990, the United States Department of Health and Human Services published *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. This publication denounced smoking as the most important cause of death and disease in the country and identified objectives to promote smoking cessation and prevent smoking initiation by youth. Specific goals were to: (a) reduce cigarette smoking to a prevalence of no more than 15% among people aged 20 or older, (b) reduce the prevalence of cigarette smoking among reproductive-age women to 12%, (c) increase smoking cessation during pregnancy from 39% to 60%, (d) reduce from 39% to no more than 20% the number of children aged six or younger who are regularly exposed to cigarette smoke at home (U.S. DHHS). In the 1995 midcourse review of progress toward these goals, the outlook seemed grim. Cigarette smoking was found to have only dropped to 25%. Additionally,

successful smoking cessation during pregnancy decreased from 39% to 31%, moving away from the 1990 goal (U.S. DHHS, 1995). Even when women successfully quit during pregnancy, 40% to 90% relapse to smoking after giving birth (McBride, Pirie, and Curry, 1992). Finally, the number of children regularly exposed to smoking at home had decreased, but only to 27%. While smoking is hazardous for both genders, smoking in women of childbearing age is especially problematic considering smoking's adverse effects on both themselves and their unborn children.

Intensive research and public health efforts have been directed to developing programs and treatments supporting smoking cessation. A wide variety of medical, behavioral, and alternative approaches to smoking cessation have been developed including self-help aids, support groups, nicotine replacement products, counseling, relaxation training, hypnosis, and acupuncture (U.S. DHHS, 1995). Despite the multitude of existing therapies, success rates have been discouraging. Approximately 70% of participants in formal smoking cessation programs relapse to smoking within one year (Fiore et. al., 1990). Although self-quitters have a higher rate of success than those who complete formal programs, still only 48% are successful (Fiore et. al., 1990).

While there has been extensive research addressing smoking cessation, truly effective strategies have not yet been developed and further research is clearly needed to meet public health goals. Interestingly, while there have been thousands of quantitative studies, there is a paucity of exploratory research describing the experience of successful smoking cessation. Rigorous exploratory research may well uncover themes yet undisclosed by quantitative research. Exploring the lived experience of successful smoking cessation may yield information beneficial to health care providers in tailoring

their smoking cessation interventions. Smoking cessation is a stressful endeavor. The failure rate for would-be quitters underlines the arduous nature of the cessation process. The benefit of pre-procedural teaching toward improving cooperation and coping skills during a difficult or unpleasant procedure is a well-established tenet in nursing. Pre-procedural teaching has been utilized effectively in preparation for childbirth as well as surgical procedures. If the experience of successful smoking cessation, including barriers encountered, and effective coping strategies could be described to prospective quitters, it would certainly better prepare them and improve their chances for success.

The purpose of this study is to describe women's lived experience of successful smoking cessation, and to uncover information that may be helpful to health care providers endeavoring to assist women to prevail in their smoking cessation efforts. A phenomenological approach will be utilized for this qualitative study.

### Summary

This chapter has introduced the hazards and costs of smoking. The purpose of the present study addressing women's lived experience of successful smoking cessation is presented. Gaps in the literature reflect a need for more qualitative studies on this topic.



## CHAPTER 2

### REVIEW OF THE LITERATURE

Since the initial report by the Surgeon General proclaiming the hazards of smoking, smoking cessation efforts and corresponding studies have proliferated. Thousands of studies have evaluated cessation statistics, pharmacological and behavioral treatment programs, demographics, and physiological and psychological characteristics associated with successful smoking cessation. Some studies have focused on sub-segments of the population including women.

Surprisingly, only a few studies have been exploratory in nature. Exploring the experience of successful cessation may yield previously undisclosed avenues to support would-be quitters and health care professionals who seek to assist them. This literature review will scrutinize qualitative studies related to the experience of smoking cessation. In view of the paucity of qualitative research, pertinent quantitative studies of the cessation process and associated psychosocial characteristics will additionally be considered.

#### Qualitative Studies

In the single exploratory study examining the experience of successful cessation, Puskar, (1995) utilized a semi-structured interview format to describe successful smoking

cessation as experienced by adult women. Puskar formulated seven open-ended questions based on a review of the literature. Content validity was established by expert review of the interview format. After analyzing the data, which "provided a rich depiction of the experience of smoking cessation" (p. 84) she identified four themes: (a) evolving commitment to health and personal growth, (b) being stigmatized, (c) changing conceptualization of smoking and smoking cessation and (d) smoking cessation as a relational phenomenon. Evolving commitment to health refers to a general commitment to health and personal growth in these women which served as a powerful motivator. Six of the ten subjects also adopted other positive health behaviors such as dietary modifications or exercise programs. Stigmatization reflects the impression of study participants that others disapproved of their smoking as well as restrictions on smoking in public places. Subjects felt like outcasts because they smoked. Nine of the ten participants also consciously cultivated and developed a negative attitude toward smoking. This changing conceptualization also included a dissociation of the individuals from the sense of self-as-smoker. Finally, the theme of smoking as a relational phenomenon was expressed as feelings participants had toward those who continued to smoke. Most participants felt anger and disgust although some tempered those negative feelings with empathy and attempts to avoid self-righteousness.

This study's strength is how it enables the reader gain a true perspective of how study participants felt during their experience. Stigmatization, changing conceptualization, and relational perspectives had not previously been described, underlining the value of exploratory research in discovering new and important themes.

Data were analyzed in accordance with procedures outlined by Miles and Huberman (1994) to ensure rigor and avoid bias in the process.

The study's main weakness is the sampling procedure. A convenience sample was utilized and eligibility criteria included a smoking history of at least 10 cigarettes per day for at least 1 year prior to quitting. This represents a fairly minimal smoking history. Although qualitative research may utilize small sample sizes, purposive sampling to choose smokers more habituated to the smoking habit may have yielded more of the barriers overcome during the cessation process.

Brown (1996) utilized grounded theory to study the subjective experience of 21 older adults who quit smoking. Brown purposively selected a mixture of male and female independent adults 60 years old or older by visiting senior centers and retirement communities. She utilized open-ended questions derived from previous knowledge and the literature about smoking cessation to encourage study participants to describe their perception of smoking cessation. In accordance with Puskar's findings, Brown discovered that smokers redefined themselves as non-smokers during the cessation process. A portion of this process included a cognitive redefinition of smoking as undesirable and offensive; comparable to Puskar's described theme of changing conceptualization. Brown found that as participants cognitively redefined themselves, this transformation was operationalized in their lives. She defines four major theoretical sub-themes described by participants which occurred within the context of redefining self as nonsmoker: (a) recognizing the need to quit, (b) making the decision, (c) learning to be a nonsmoker and (d) sustaining the quit. Many of these themes contain the same elements described by Puskar. In recognizing the need to quit, participants cited changing social norms,

comparable to Puskar's identified theme of stigmatization. Another common theme unique to this group was viewing smoking as a wasteful activity as cigarette costs increased. Although this particular theme was not identified in Puskar's study, it parallels her theme of changing conceptualization of smoking. Making the decision to quit, as in Puskar's study, was frequently motivated by a desire to adopt a healthier lifestyle. Many felt vulnerable due to smoking related illnesses. Participants also expressed a new and total commitment to smoking cessation not previously present during prior unsuccessful attempts.

One theme emerging from Brown's study not evidenced in Puskar's, was the process of learning to be a nonsmoker. Participants described deliberate strategies they adopted in their efforts to quit, including limiting access, ritualistic behaviors symbolizing their passage, seeking assistance from others, and avoiding tempting situations. Additionally, many sought various alternative behaviors to keep themselves occupied. Another novel theme emerging from this study is sustaining oneself as a nonsmoker. Participants reported ambivalence, and utilized feelings of pride, reconfirmation of intentions to quit and responses from family and friends to sustain their continued commitment to smoking cessation. Many participants reported that the pride they felt in their success perpetuated and reconfirmed their decision to quit and their cessation efforts.

Brown's study delves deeper into the cessation experience. The sampling was purposive and included many long-time smokers, perhaps enriching the depth of the data. The researcher describes a careful and methodical data analysis system in accordance with grounded theory guidelines, and cites both Glaser and Strauss, and Hutchinson as

methodological references. While this study hints at the arduous process participants endured in their cessation endeavors, a complete depiction of the experience eludes description. Rather than experiences encountered, the results focus on strategies utilized by participants to successfully quit. Perhaps this reflects the researcher's interview questions. Another possibility is the sampling inclusion criteria. Participants were selected up to five years after they had quit smoking, perhaps effecting a less vivid recall of the experience.

Finally, Stewart et. al. (1996) studied causes and cessation of smoking among disadvantaged women. They aimed to identify social-psychological factors associated with smoking and smoking cessation within this group. This study did not require successful cessation for inclusion. Participants were uniformly from lower education and socioeconomic groups. While participants unanimously reported a dislike of smoking, they identified unique barriers to cessation including lack of social support, and needing smoking as a coping mechanism for multiple life stressors associated with their socio-economic status. Additionally, they cited their opinions regarding the types of cessation support services they thought would benefit them.

This study was less rigorously conducted than the other two. Researchers utilized both individual and group interviews to record participants' recollections, reflections, opinions, and beliefs about smoking cessation. The method of data analysis is not well described. Furthermore, it would seemingly be difficult with group interviews to separate and analyze individual contributions. While this study may include valuable contributions, it is difficult to view the results as more than anecdotal, in view of the methods and analysis utilized.

### Relevant Quantitative Studies

In 1996, the Agency for Health Care Policy and Research (AHCPR) published clinical practice guidelines to assist clinicians and others in identifying and delivering effective smoking cessation interventions (U.S.DHHS, 1996). Developed by an interdisciplinary group of smoking cessation experts, these guidelines were based on an extensive review of the cessation literature. Included studies were uniformly empirical in nature and required to meet strict scientific criteria. The guidelines therefore reflect the most stringently evaluated quantitative studies. Accordingly they are an ideal resource to guide the selection of psychosocial variables associated with successful smoking cessation as identified through quantitative research methods. Variables associated with lower cessation rates by the AHCPR include: (a) high nicotine dependence, (b) psychiatric comorbidity, (c) low motivation, (d) low readiness to change, (e) low self efficacy, (f) environmental risks, and (g) high stress level (U.S.DHHS, 1996).

Self-efficacy was originally defined by Bandura as "the conviction that one can successfully execute the behavior required to produce the outcomes" (1997, p. 193). Applying this concept to smoking, self-efficacy may be defined as an individual's perception of their ability to refrain from smoking (Macnee & Talsma, 1995). Studies have shown self-efficacy to strongly predict an individual's engagement in many health promotional behaviors including smoking cessation (DiClemente, 1981, Kowalski, 1996, & Pender, 1996).

Three of the variables identified by the AHCPR; high nicotine dependence, environmental risks, and high stress level are consistent with typical barriers encountered during smoking cessation (Macnee & Talsma, 1995). These variables may legitimately be

grouped as barriers to smoking cessation. Perceived barriers were originally described and tested within the Health Belief Model (HBM) (Rosenstock, 1974), and later within the Health Promotion model (Pender, 1987). Perceived barriers may be defined as beliefs an individual holds concerning the costs associated with taking a health action (Melnik, 1980). Barriers are strongly and inversely predictive of health promotional behavior (Melnik, 1980; Pender, 1996). Barriers to smoking cessation are unique in that nicotine addiction and other smoking specific stressors must be considered. Macnee and Talsma (1995) conceptualized barriers to smoking cessation considering stressors specific to cessation. Barriers, as operationalized by Macnee and Talsma were predictive of initiation of smoking cessation and positive movement toward cessation.

The influence of low motivation and low readiness to change is reflected in the research initiated by Prochaska and DiClemente (1983,1984) related to the nature and process of behavior change. Their widely accepted and extensively studied theory views behavior change, including smoking cessation as a process rather than a single event. Stages identified in the change process include (a) precontemplation, (b) contemplation, (c) planning or preparation, (d) action, and (e) maintenance. This change process, and its associated stages, have been defined and applied in relation to smoking.

A smoker in the precontemplation stage does not intend to quit in the foreseeable future, generally defined as the upcoming six months. In the contemplation stage, individuals are thinking of quitting, although they may still be ambivalent. During preparation, individuals are intending to change in the next month. Individuals in the action stage, which lasts approximately six months, have modified their behavior, such as

quitting smoking. Finally, during maintenance, individuals sustain and strengthen their new behaviors (Prochaska & Goldstein, 1991).

An individual in the precontemplation stage exhibits low motivation and low readiness for change. Individuals in this stage are often unaware or under aware of the extent of their problem. Multiple studies have found individuals in the precontemplation stage to be highly resistant to cessation programs and (Prochaska, DiClemente, & Norcross, 1992; DiClemente et. al., 1991; Prochaska, Velicer, DiClemente, & Fava, 1988).

A variety of studies have linked psychiatric disorders with both a higher rate of smoking and a decreased cessation rate, although mixed findings exist. Glassman and Covey (1996) found a dramatic increase in lifetime incidence of smoking in individuals with any history of major depression. Additionally, in a study of 3000 individuals attempting to quit, they discovered that the success rate in depressed individuals was half that of those who were not depressed. Further investigation of this phenomenon revealed a greater propensity in those with a history of depression to suffer depression during smoking cessation. 80% of previously depressed individuals became depressed during cessation as compared to 25% of those with no previous history of depression. These differences were especially pronounced in women. In addition to highlighting the difference in depressive symptoms between groups, this and similar studies also disclosed depression as an important withdrawal symptom in all groups. A previous report by the Surgeon General on nicotine addiction and the adverse effects of smoking had not listed depression as a symptom during cessation (U.S.DHHS, 1988). In a conflicting study, Ginsberg et. al (1997) found no difference in smoking cessation success rates between



women with a history of depression who were not currently depressed, and women with no history of depression. Romans, McNoe, Herbison, Walton, and Mullen (1993) found a correlation between smoking and depression and anxiety, although their research did not explain any causality in the relationship. They also discovered an association between remission of psychiatric symptoms and smoking behavior. They postulate that actions of nicotine on central neuroreceptor pathways may play a role in ameliorating symptoms of depression and anxiety, making it more difficult for smokers to quit. Newhouse and Hughes (1991) suggested that nicotine may act as a possible therapeutic agent for some psychiatric disorders such as Alzheimer's disease and Tourette's syndrome.

#### Correlates in Women

While the attributes associated with successful smoking cessation apply to both sexes, there may be characteristics and issues unique to women. Shiffman (1979) found women reported more withdrawal symptoms during cessation. This research finding was refuted however by both Svikis (1986) and Hughes (1992) who found no difference in reported withdrawal symptoms between sexes. The report of symptoms seems to vary depending on timing of post-cessation interviews. Pomerleau (1996) found symptoms to be equal when studies were conducted during the actual period of abstinence, but found men to recall significantly fewer symptoms when recalling past cessation attempts. These findings suggest that differences between sexes in reported symptoms may actually reflect differences in recall between men and women, with women recalling unpleasant symptoms more vividly and accurately.

### Summary

Qualitative studies on smoking cessation are few, but findings agree that health considerations serve as a primary motivator for those endeavoring to quit. Studies by Brown and Puskar discovered several common themes. Both identified a changing self-conceptualization in the successful quitter, as individuals redefined themselves as nonsmokers. Additionally, both researchers found that smokers were influenced to quit by feelings of stigmatization or disapproval from others regarding their smoking. Brown's subjects also identified deliberate strategies they employed as they learned to become nonsmokers and sustain their nonsmoking status.

Quantitative studies on smoking cessation, are numerous, and there is consensus among researchers regarding key variables. Psychosocial variables related to success in smoking cessation identified by the AHCPR are based on hundreds of scientific studies. Identified variables include barriers to cessation such as high nicotine dependence, environmental risks, and high stress. Macnee and Talsmas' findings support the inverse relationship between increased perceived barriers and successful cessation. Additionally, the AHCPR identified low motivation and low readiness to change as predictors of poor cessation success, findings supported by Prochaska and DiClemente's well known research on change theory. Finally, several authors support the AHCPR's contention that psychiatric comorbidity is an obstacle to smoking cessation.

Studies specific to women are conflicting. While Shiffman found greater symptoms in women during cessation attempts, this finding was refuted by other researchers, (Pirie et. al, 1991; Svikis, 1986; and Hughes, 1992). Pomerleau's findings

that reported symptoms were equal among sexes when measured during quit attempts suggest that differences may be in recall or symptoms rather than actual symptoms experienced.

## CHAPTER 3

### THEORETICAL FRAMEWORK

Virtually all smoking cessation research identifies health-seeking behavior as a primary motivator for those endeavoring to quit. Accordingly, a health promotion model offers the ideal framework within which to view cessation research. Pender's (1996) Revised Health Promotion Model (HPM) will be utilized to provide a theoretical framework for this study. Pender's model is intended to provide nurses with a framework for assisting clients to adopt healthier lifestyles, and provides a scientific basis for health motivation (Pender, 1996). Smoking cessation, conceptualized within the HPM, may be defined as a health protection behavior, or an action seeking to move away from or avoid the negatively valences states of illness or injury. Pender differentiates between health protection and health promotion, which is action directed toward increasing well being and self-actualization. She acknowledges, while making this distinction that a mixed motivation model, including both "approaching a positive state and avoiding a negative state" (Pender 1996, p. 34) is most appropriate when considering adult health behaviors. She advises that while her model is applicable to either health protection or health promotion behaviors, researchers should consult additional sources when addressing problem behaviors. The Stages of Change Model identifying smoking as a dynamic process rather than a single event has been identified as a key conceptual development in

smoking cessation research (Lichtenstein & Glasgow, 1992). Therefore, Prochaska and DiClemente's (1984) Stages of Change Theory will additionally be utilized to guide the formulation of interview questions specific to smoking cessation. The two frameworks compliment each other with Pender's HPM addressing the motivational, cognitive, and situational characteristics associated with smoking cessation, while the Stages of Change Model considers the process.

### Theoretical Basis For The Health Promotion Model

The HPM is based on social learning theory, which identifies the role of cognitive mediation in the regulation of behavior. Pender adopts a broad definition of health: "Health is the actualization of inherent and acquired human potential through goal-directed behavior, competent self-care, and satisfying relationships with others while adjustments are made as needed to maintain structural integrity and harmony with relevant environments" (Pender, 1996, p. 22). Pender's 1996 Revised Health Promotion Model represents the second revision of a model that first appeared in nursing literature in the early 1980's and is based on extensive research by Pender and others testing her earlier model. Pender describes the HMP as: "an attempt to depict the multidimensional nature of persons interacting with their environment as they pursue health" (Pender, 1996, p. 53).

### The HPM and Related Concepts

The HPM (see Appendix A) proposes variables influencing health promoting behavior. The two major categories influencing behavioral outcomes are (a) individual

characteristics and experiences, and (b) behavior-specific cognitions and affect.

### Individual Characteristics and Experiences

According to Pender, unique personal characteristics and experiences affect future actions. Prior behavior may affect behavior directly, through habit formation, or indirectly, through behavior induced influence on self-efficacy, benefits, barriers, and activity related affect (Pender, 1996). These latter concepts, termed behavior-specific cognitions and affect, will be defined and discussed shortly.

Additionally, personal factors, including biologic, psychologic, and sociocultural factors influence health behaviors, and should be considered when assessing individual's behavior and planning health promotional interventions. Examples of personal factors are age, gender, strength, self-esteem, perceived health status, and definition of health.

### Behavior-Specific Cognitions and Affect

This category of variables, identified as a major factor in health behavior motivation (Pender, 1996) includes perceived benefits of action, perceived barriers to action, perceived self efficacy, and activity-related affect, as well as interpersonal and situational influences. Smoking cessation literature supports the motivational significance of each of these factors. Although some of these concepts were defined in the previous chapter, their definition, and their significance to smoking cessation, will be reviewed here as they are discussed as part of Pender's theoretical framework

Perceived benefit of action is defined as the "mental representations of the positive or reinforcing consequences of a behavior" (Pender, 1996, p.68). Individuals will be more likely to invest time and effort in activities perceived as likely to result in positive outcomes. Benefits may be intrinsic, such as increased energy, or extrinsic, such

as monetary. The motivational impact of perceived benefits has been empirically supported by Pender. The AHCPR guidelines also support the significance of perceived benefits in motivating individuals to quit smoking (U.S. DHHS, 1996). They recommend counseling on health benefits of smoking cessation as an effective motivator.

Perceived barriers to action are strongly predictive of a variety of health promotional and protective behaviors, including smoking cessation. Pender defines barriers as "perceptions concerning the unavailability, inconvenience, expense, difficult, or time-consuming nature of a particular action" (Pender, 1996, p. 69). She additionally implicates loss of satisfaction from giving up damaging behavior such as smoking as a potential barrier (Pender, 1996). When perceived barriers to a particular behavior are high, that behavior is unlikely to occur. The inverse relationship between perceived barriers and smoking cessation success has been supported by cessation research (Macnee & Talsma, 1995; U.S.DHHS, 1996).

Perceived self-efficacy is a "judgement of one's abilities to accomplish a certain level of performance" (Pender, 1996, p. 69). Personal information regarding one's self-efficacy comes from: (a) personal accomplishments, (b) vicarious experiences of observing others, (c) encouragement and persuasion from others regarding one's abilities, and (d) physiologic states, such as anxiety or tranquility from which people judge their abilities (Pender, 1996). The greater one's self-efficacy in relation to a given behavior, the greater the likelihood of engaging in that behavior (Pender, 1996). As previously discussed, the role of self-efficacy in successful smoking cessation has been strongly supported (DiClemente, 1981 & Kowalski, 1996).

Activity-related affect refers to subjective feelings based on the stimulus

properties of the behavior, which are subsequently stored in memory and associated with subsequent thoughts of that behavior (Pender, 1996). Behaviors may be associated with positive, negative, or mixed positive and negative affect. Behaviors causing positive affect are likely to be repeated and those causing negative affect are likely to be avoided (Pender, 1996). This concept is certainly appropriately applied to smoking cessation, since both negative and positive feelings are associated with the process (Puskar, 1995, Brown, 1996).

Pender lists three interpersonal influences that potentially affect individual's likelihood of engaging in health-promoting behaviors: (a) Norms, or expectations of significant others; (b) social support, or instrumental and emotional encouragement; and (c) modeling, or vicarious learning from observing others (Pender, 1996). Although susceptibility to the influence of others varies individually and culturally, individuals are likely to engage in behaviors for which they will be supported by significant others and peers (Pender, 1996). Several studies have linked interpersonal influences to smoking cessation success (Jensen, P.M., & Coombs, R.B. (1994), Puskar, 1995, Brown, 1996). Additionally, Macnee and Talsma (1995) include lack of encouragement from family and friends as a significant barrier to cessation in the instrument they designed and tested to measure barriers to smoking cessation.

Finally, Pender discusses the role of situational influences, or "perceptions of options available, demand characteristics, and aesthetic features of the environment in which a given behavior is proposed to take place" (Pender, 1996, p. 71). Situational influences may affect behaviors directly or indirectly. Pender cites a no smoking



environment as a situational influence that creates "demand characteristics for no-smoking behavior" (Pender, 1996, p. 71).

### Stages of Change Model

Prochaska and DiClemente (1982) in a search to determine how people modify addictive behaviors, identified a series of distinct stages that individuals move through during the change process. They, and others, have extensively tested and refined their Stages of Change Model ( DiClemente, Prochaska, & Norcross, 1992), particularly in relation to smoking cessation. Multiple studies provide strong support for this model which is applicable both to self-quitters and those who quit with expert assistance of some type. Modification of addictive behavior involves progression through five stages; precontemplation, contemplation, preparation, action and maintenance. Individuals typically move through these stages during the cessation process, often relapsing and recycling back to earlier stages many times before they successfully quit. The following discussion will further define the individual stages.

### Precontemplation

Precontemplation is a stage where the individual has no intention to change their behavior in the foreseeable future. Many individuals do not comprehend that their behavior is a problem. They may feel pressure from surrounding individuals such as family and friends to change their behavior. They may also wish to change, but have no intention to do so. The hallmark of this stage is a resistance to recognition of the problem nature of a behavior, such as smoking (Prochaska, Diclemente, & Norcross, 1992).

### Contemplation

During the contemplation stage, individuals are aware that a problem exists and

are seriously thinking about modifying their behavior, but have not yet made a commitment to action. It is common for people to stay in the contemplation stage for prolonged periods of time (Prochaska, DiClemente, & Norcross, 1992).

### Preparation

In the preparation stage, the individual combines intention with behavioral criteria (Prochaska, DiClemente, & Norcross, 1992). Individuals in the preparation stage have tried unsuccessfully to quit during the past year, month, and exhibit some small behavioral changes, such as smoking fewer cigarettes or intentionally delaying smoking.

### Action

Action is the stage during which individuals modify their behavior in order to overcome their problems. This stage requires considerable commitment of time and energy. In smoking cessation, the action stage is the most externally visible, and is often mistaken for change. Mistaking the action stage as the entire change process overlooks the considerable emotional preparation leading to the change and the subsequent work to maintain the change (Prochaska, DiClemente, & Norcross, 1992). Individuals are classified as being in the action stage if they have successfully stopped smoking for a period of from one day to six months. Success denotes reaching abstinence from the behavior. Cutting down on smoking or switching to a lower tar brand may prepare an individual for the action stage but do not satisfy the stage's criteria for success (Prochaska, DiClemente, & Norcross, 1992).

### Maintenance

During the maintenance stage, which may be viewed as continuation of the change process, individuals work to prevent relapse. For smoking cessation and other

addictive behaviors, this stage extends from six months for an indefinite period past the initial action. The criteria for being in maintenance includes being free of the addictive behavior and engaging in new behaviors incompatible with the addictive behavior (Prochaska, DiClemente, & Norcross, 1992).

### Research questions

This exploratory study seeks to describe the experience of successful smoking cessation. The research questions based on this goal are: (a) How do adult women who have successfully quit smoking describe the experience? (b) What cognitive and/or affective processes occur in adult women during the smoking cessation process? (c) How do adult women who have successfully quit smoking describe the changes in their life associated with successful cessation maintenance?

### Assumptions

Two theoretical assumptions underlie this study. The assumptions are: (a) Subjects will be truthful in their responses to interview questions. b) Individuals who quit smoking will have a significant experience, the recounting of which will be of value to others endeavoring to quit and those who aspire to assist them.

### Summary and Application

This chapter presents a discussion of Pender's HPM and Prochaska and DiClementes' Stages of change Model. These models serve as a theoretical framework

for the present study. Research questions and assumptions are identified which give direction to the study.

## CHAPTER 4

### METHODS AND PROCEDURES

#### Introduction

This study seeks to explore and describe the phenomenon of successful smoking cessation in women. Although exploratory research is classically viewed as relatively unstructured, Miles and Huberman (1994) make a persuasive case for utilizing a tighter, more structured design, especially with well-delineated constructs. They postulate that new researchers or those looking at a better understood phenomenon will waste time using a looser inductive approach. They advocate using what is already known about a phenomenon to formulate a starting point, allowing the researcher to select important data, while avoiding the mundane. Smoking cessation, with its extensively published body of quantitative research, certainly qualifies as a well-delineated construct. Accordingly, health promotion theory as well as smoking cessation literature provided structure and clarity to guide sampling, data collection, and analysis.

#### Method

This qualitative analysis of the smoking cessation experience utilized a phenomenological approach, described by Miles and Huberman (1994) as a way to a deep understanding of the subject of one's inquiry. Accordingly, the study sought to answer the

following questions: (a) How do adult women who have successfully quit smoking describe the experience? (b) What cognitive and/or affective processes occur in adult women have during the smoking cessation process? (c) How do adult women who have successfully quit smoking describe the changes in their lives associated with successful smoking cessation maintenance?

### Definitions

A smoker was defined as an individual who has smoked at least one pack-per-day for at least three years. This definition sought to purposively select individuals who had a significant smoking habit to better elicit an accurate account of the cessation experience. Smoking cessation maintenance was defined as a participant's self-report of total abstinence from cigarettes for six months. This duration is in accordance with Prochaska's and DiClemente's (1984) stage of cessation maintenance. It is fairly stringent in terms of defined cessation maintenance, which ranges from one day to one year, and is supported by the majority of researchers (Lichenstein & Glasgow, 1992; Kottke et. al. 1988). Smoking cessation was measured by self-report. Parazzini et. al. (1996) compared self-report of smoking cessation with analysis of salivary cotinine and concluded that the measurement methods had comparable validity. Additionally, eliciting biochemical confirmation of cessation in this qualitative, personal interview format could have hampered the development of a trusting relationship between participant and researcher, and therefore interfered with optimal data collection.

## Sample

The population studied was adult women who had successfully quit smoking. Women were selected for several reasons. Limiting the study to one sex decreased the chance of any sex-related differences in the cessation experience acting as a confounding variable in the study. Women were chosen since smoking rates among women have increased steadily during the past several decades, posing an increased threat to women's health and increasing the incidence of smoking related illnesses and deaths. Additionally, smoking in child-bearing women creates a health risk not only to the individual woman, but also to her children, compounding the dangers. In accordance with established qualitative research guidelines, participants were selected and interviewed until themes were saturated, or to a maximum of 15 participants. The 15 participant maximum is in accordance with Miles and Hubermans' (1994) assertion that a qualitative study utilizing more than 15 participants can become unwieldy. Sampling until saturation of themes occurs is an established method in qualitative analysis which refers to the practice of continuing to interview additional participants until the point of redundancy, where no new information is forthcoming (Lincoln & Guba, 1985). Saturation of themes was reached when 10 subjects had been interviewed, with no new information was forthcoming. Sampling continued, however, to provide a margin of safety in terms of data reliability. The last 2 interviews confirmed the attainment of the point of redundancy, so sampling was stopped at that point. Participants were purposively selected to best reflect the phenomenon being studied. Accordingly, the researcher endeavored to select women who had a significant smoking history. To ensure optimal participant recall of the cessation experience, only participants who had quit smoking within the last three year

period were selected. Qualifying participants were solicited from acquaintances and colleagues of the researcher. Additionally, participants were solicited from a community-based cessation program. Snowball sampling was utilized by requesting that selected participants refer others who had successfully quit. Participants were excluded if they were currently using tobacco or nicotine products.

### Procedure

Demographic data was obtained from participants, including age, race, marital status, education, occupation, and smoking history. Participants were interviewed by the researcher utilizing a semistructured, focused interview format consisting of six open-ended questions based on the research questions, theoretical framework and literature (See appendix D). Interviews lasted from 25-45 minutes and were conducted in the subjects home or office at their convenience. Content validity of the interview format was confirmed by an expert in the field of smoking cessation research, a member of the nursing faculty, and a leading smoking cessation facilitator. The interviews were audio taped and transcribed by the researcher.

### Ethical Considerations

Informed consent was obtained from study participants prior to their involvement. Each transcript was assigned a letter, which was used thereafter for identification of individual questionnaires. Names were retained only for correspondence purposes and follow-up. Fictitious names have been used when reporting data. Transcripts were kept in a locked file cabinet at the home of the researcher. Audiotapes were destroyed or erased



at the end of the study. The research proposal was submitted for review and approved by (a) the Thesis committee, (b) the UNLV Department of Nursing and (c) the UNLV Human Subject Rights Committee. Since the study entailed no treatment to participants and did not involve potentially damaging disclosures, there was no identified risk to participants. Participants who posed questions about maintaining smoking cessation were given standard literature from a smoking cessation program at the conclusion of the interview, and referred to the program for further support.

### Data Analysis

Data was analyzed according to strategies outlined by Miles and Huberman (1994). Within one week of the interview, the audiotape was transcribed and written transcription was reviewed. Specific analysis techniques include (a) memoing, (b) coding, (c) producing vignettes, (d) displaying data, (e) isolating patterns and (f) elaborating generalities in the form of themes.

#### Memoing

Memoing refers to reflective remarks written during the initial coding process, that reflect the ideas and theories that strike the researcher (Miles and Huberman, 1994). Memoing was initially utilized to view the data without attempting to fit it into any previously conceived codes. During the initial view of the data, every attempt was made by the researcher to bracket previous knowledge of smoking cessation research and theory. Pieces of data were assigned words reflecting their meaning which became the basis for codes. Memoing was utilized throughout the coding process to assist to explain, conceptualize and form beginning theories about the data and emerging patterns.

### Coding

After the initial fresh view of the data, with reflective remarks written in the margins, the data was viewed a second time within the framework of the provisional start list of codes based on the study models (See Appendix B). Codes which emerged during the first look at the data were applied to concepts of the models as they fit and new codes were generated as they were encountered. Transcripts were coded as soon as they were transcribed to improve researcher recall and dynamically develop code revision.

### Code Reliability

Miles and Huberman recommend check-coding to sharpen definitions and establish reliability of the codes. Code reliability was determined through check-coding by a second researcher of the first ten pages of the first transcribed interview. Intercooder reliability was determined utilizing this formula:

$$\text{Reliability} = \frac{\text{Number of agreements}}{\text{Total number of agreements} + \text{disagreements}}$$

The two researchers discussed any differences, expanding or amending definitions and codes until an intercoder reliability of 80-90% was attained. The primary researcher also check coded each transcript several days after the initial coding, to check internal consistency of the coding process. This intracoder reliability, checking initial code-recode reliability also was 80-90%. This check code process exceeded the recommendations of Miles and Huberman.

### Vignettes

Vignettes are focused descriptions of a series of events, which are typical or emblematic of the case being analyzed. They are described by Miles and Huberman

(1994, p. 81) as "rich pockets of especially representative, meaningful data". Vignettes are ideal tools to utilize in this study which seeks to explicate an experiential phenomenon. Vignettes were produced by the researcher based on appropriate selected excerpts from the transcripts.

### Data Display

Miles and Huberman emphasize the importance of displaying data in a visual format that presents information to enable the researcher to draw valid conclusions. They recommend condensing data into a display that allows the researcher to view the entire body of data in a whole. They contend that valid data analysis requirements include a data display "focused enough to permit a viewing of a full data set in the same location, arranged systematically to answer the research questions at hand" (Miles & Huberman, 1994, p. 91). While voluminous pages of interview transcripts are cumbersome to interpret, a condensed, well-displayed version makes complicated, extended text more understandable and therefore more amenable to meaningful and accurate analysis. After coding data, it was displayed on two tri fold bulletin boards so data from all interviews could be viewed as a whole. Transcripts were cut apart and grouped by themes, with the theme displayed as a heading. Data could thus be compared across interviews for homogeneity among similarly labeled phrases.

### Identifying Patterns and Themes

Conclusions were drawn and explained through noting patterns and themes from the displayed data. Each case was evaluated individually for descriptive understanding before any cross-case patterns were analyzed. Initial conclusions were verified by checking them back against the original transcribed interview. Representative exemplars

for conclusions from transcripts were included in written explanations to illustrate, verify and clarify explanations.

Although initial impressions for analysis may be generated by researcher intuition, termed “seeing plausibility” by Miles and Huberman (1994), preliminary conclusions were subjected to other tactics to verify conclusions. As data was clustered or grouped into categories that were conceptually similar, further refinement of themes and formation of categories was accomplished. Clustering, or the inductive formation of categories, is the process of moving to higher levels of abstraction, or “subsuming particulars into the general” (Miles and Huberman, 1994, p. 250).

Although qualitative research has to do more with quality than quantity, Miles and Huberman advocate using some quantitative analysis to (a) see what you have in a large batch of data, (b) keep yourself analytically honest and (c) protect against bias. Accordingly, frequency of identified themes was quantified and reported in association with results.

### Methodological Rigor

Miles and Huberman suggest a variety of tactics confronting the issue of validity in qualitative research. These tactics are designed to avoid analytic bias that can weaken or invalidate findings. They report the following examples of typical biases (Miles and Huberman, 1994):

1. The holistic fallacy: Interpreting events as more patterned than they really are, and ignoring loose ends and incongruent details.
2. Elite bias: Over weighting data from more articulate sources and under

representing data from less articulate or lower-status informants.

3. Going native: The researcher loses their objectivity and ability to bracket their knowledge about the topic being researched

Three tactics suggested by Miles and Huberman (1994) were utilized to ensure the basic quality of the data and minimize bias. Selection of tactics was based on their appropriateness to the study being conducted.

#### Checking For Representativeness

One pitfall identified by Miles and Huberman is the possibility of drawing conclusions based on sampling a non-representative segment of the population. Tactics they recommend to avoid this elite bias, include (a) increasing the number of cases, (b) looking purposively for contrasting cases and (c) Sampling within the total universe of people and phenomenon under study. These tactics were utilized during sampling to obtain a maximally representative sample. For example, the researcher purposively sought participants from a variety of sources and backgrounds. Efforts were made to solicit participants who had differing experiences and sampling continued until saturation occurred. Looking for contrasting cases was accomplished by seeking individuals who had quit smoking through a variety of methods, so that the experience would not be influenced primarily by the program or method utilized.

#### Checking For Researcher Effects

Researcher effects fall into two categories: (a) researcher effects on the site and (b) effects on the researcher from the site. Suggestions were utilized as appropriate for this study to avoid these biases including: (a) Making intentions unequivocal for

informants regarding the purpose of the study and use of results (b) doing some interviewing in a congenial, social environment such as the participants home to reduce the threat quotient, (c) including people with different points of view and (d) showing field notes to a colleague, in this case a faculty member with experience in qualitative research. Finally, although considerable research on the topic being studied preceded data collection, the intended use of preexisting literature and theory has been to focus and bound the collection of data. During data analysis, the researcher made every attempt to bracket previously held knowledge and opinions. Bracketing is a key concept utilized to promote methodological rigor in qualitative analysis which involves a conscious intention on the part of the researcher to set aside opinions and knowledge they possess related to the topic being studied, and to view the data from an unbiased viewpoint.

#### Getting Feedback From Informants

Getting feedback as to the validity of conclusions by eliciting corroboration from study participants is a logical and established method of ensuring validity of data (Miles and Huberman, (1994). Conclusions were discussed with three of the subjects. Subjects were chosen to represent the three distinct types of women represented in the study: (a) binge smokers, (b) smokers declaring themselves “between cigarettes” and (c) transformed smokers. Feedback regarding validity of conclusions were elicited from each of these three women. All agreed with the researcher’s interpretation of the cessation experience and with identified themes. The only disagreement was from the subject who had identified herself as being “between cigarettes”. While she had previously identified her sister’s and best friend’s smoking in her proximity as a significant trigger for urges to smoke, she no longer had this perception. It was interesting that her viewpoint had

changed in this respect in only two months and perhaps represented progress on her part toward cessation maintenance.

### Summary

This chapter discussed method, definitions, sample, procedure and ethical considerations. Data analysis and means to ensure methodological rigor were presented in depth.

## CHAPTER 5

### FINDINGS

The purpose of this study is to describe women's lived experience of successful smoking cessation. Accordingly, findings are presented to explicate the subject's experience. It is the researcher's intention to create for the reader a vivid picture of the smoking cessation process as experienced by study subjects. Demographic data are presented. Findings are discussed within the context of the two foundational models. Additionally other emergent themes are presented. The relationship of themes to stages of cessation is explored. Pseudonyms are used when presenting quotes. A brief biographical sketch of each subjects is available (See Appendix B) to substantiate the reader's perception of each individual and to make quotes more meaningful.

#### Demographics and Smoking History

Twelve women participated in the study; all Caucasian. Subjects ranged in age from 31 to 62. Average age was 51. All but two were employed at the time of the interview. Employed subjects included (a) two administrative secretaries, (b) one addiction counselor, (c) one medical office administrator, (d) two registered nurses, (e) one dental hygienist, (f) one realtor, (g) one software professional, and (h) one medical assistant. Of the two women not currently employed, one was a lifelong homemaker, the



other a retired teacher. Smoking histories of the subjects revealed that the age of smoking initiation varied from 11 to 25 with a mean starting age of 16.6. Total years of smoking ranged from 10 to 50 with a mean of 32.6. Number of cigarettes smoked per day ranged from 10 to 60 with a mean of 30. Ten of the 12 subjects had made at least one previous attempt to quit and had subsequently relapsed to smoking. The length of the current abstinence period ranged from 6 to 36 months with a mean of 23 months.

The primary methods of smoking cessation used for the current abstinent period included the following: (a) Five subjects quit without any specific program or assistance, (b) two subjects used wellbutrin, (c) two subjects used nicotine patches, (d) three subjects attended a formal smoking cessation program, and (e) two subjects utilized self-help guides. Two of the twelve subjects utilized more than one cessation strategy. One of the two subjects who used wellbutrin also attended a formal smoking cessation program. Another utilized wellbutrin and written self-help aids. All three subjects who quit through a formal program remain involved in a 12-step program; Nicotine Anonymous.

### Transtheoretical Model of Change

In review, the Transtheoretical Model of Change (Prochaska, DiClemente & Norcross, 1992), identifies five stages in the process of human behavior change: (a) precontemplation, (b) contemplation, (c) preparation, (d) action, and (d) maintenance. Study findings revealed evidence of each of these stages. However, each stage was not manifest in all subjects. Additionally, length of stages varied markedly between subjects.

#### Precontemplation

In the precontemplation stage, individuals are not intending to change in the next

six months. This stage was least evident in this study, because all participants had actually quit, so by necessity had progressed past this stage. Interview questions did not specifically elicit information about the precontemplation phase, but nevertheless, several women volunteered information regarding their perceptions during this stage. Those who discussed precontemplation identified (a) enjoyment of cigarettes, (b) being in denial about consequences of smoking (c) rationalization about need to smoke as major factors preventing contemplation of smoking cessation. The following comments from “Ronnie” exemplifies typical responses about this stage.

I had no desire to quit. I enjoyed it too much....I'll take the risk. I'll take the gamble that I'll just be able to smoke like some of those that you hear about that smoke until they're a hundred and then they die....I went to California to see my brother who was dying. And I thought what's a couple of cigarettes. This is a time when I really need it.

### Contemplation

During the contemplation phase, individuals are aware that their smoking is a problem and are seriously thinking about quitting (Prochaska, DiClemente, & Norcross, 1992). This is an important stage, because it includes the inception and evolvment of motivation to quit smoking, a significant factor in cessation success. Characteristically, most women had occasional thoughts about quitting. Ten out of 12, however, described a single galvanizing experience or event which transformed fleeting or occasional thoughts about cessation into serious contemplation. These individuals could clearly describe the occurrence which motivated them to move past contemplation into preparation and action. Erica chronicles her stimulus to quit:

I had thought about quitting smoking for several years obviously because of the health risks involved and pushing forty. I realized I needed to make some lifestyle changes for my health. However, the impetus to actually getting me to quit smoking was the fact that I was teaching. I was teaching med-surg and I had to do a section on pulmonary and I felt very hypocritical to stand up there and talk about all the horrible things and then go outside and smoke a cigarette.

Although there were a number of commonalities, there was considerable individual diversity among women in terms of motivation. Since this is such an important component of successful smoking cessation, motivational factors will be discussed in detail. Only 2 out of 12 individuals cited threats to physical health as their primary motivation. Each of these had actual life-threatening health conditions certain to be immediately exacerbated or perpetuated by continued smoking. Both were faced with the choice of giving up smoking or suffering extreme disability and possibly death. The clarity of their decision is illustrated by the quote by Susan, who had discovered she had hepatitis C and had been advised to quit by her physician. When asked why she was more motivated to quit than during previous attempts she said, “[It was] kind of black and white. It was either smoke and be sick or stop smoking and maybe you know you’ll have some good life left”. Others knew theoretically that smoking was bad for their health, and used this fact to strengthen their own resolve, but did not have a sense of actual or imminent threat to their personal health.

The most commonly cited primary motivator to quit smoking, expressed by 8 of 12 women, was incongruence between smoking behavior and their self-image. This image conflict emerged as a significant theme. These women had a growing awareness of

smoking as an undesirable behavior. Their continued smoking behavior, in view of their growing disgust with the habit created an incongruence between their beliefs and behavior. These individuals reported being ashamed of smoking. The basis for their shame was twofold. In some cases, external societal sanctions against smoking created a feeling of stigmatization. Janet conveys a verbal image of this perception, “ The stigma of people looking at you. I almost feel like, you know how some people treat AIDS patients like you’ve got some contagious disease”. In other cases, the perception of cigarettes and smoking as distasteful developed internally. It is possible that external cues or changing societal non-acceptance of smoking influenced this process. These women, however, reported a spontaneous shift in their beliefs about smoking which differed from the others’ feelings of stigmatization. The following quote illustrates this phenomenon as Cynthia conveys her distaste for smoking: “ My clothes and everything would smell of it and that’s what really bothered me was just the ickiness [sic] of it. The taste, the smell just started to bother me”. She goes on to express her growing discomfort with being a smoker:

There were situations though, with some people, that I would hang around with at my old job, that it was very natural to sit and drink a beer or a drink and smoke some cigarettes. With them that was part of my image there and it didn’t bother me a bit and that was a different kind of thing. But the Mom, the housewife, you know, the school kind of thing, the professional; I didn’t want it [smoking] to be part of it. I didn’t like that.

Another form of image conflict occurred when women disliked feeling controlled by cigarettes. One became acutely aware of being at the mercy of her smoking habit

during a smoking friend's hospitalization. Ronnie's fear epitomizes this feeling of loss of control:

She felt so trapped and I thought that will be me someday. I've been healthy all my life but at some point I am going to be in the hospital for something and that's going to be me....I was not going to be put in that position. It's the whole control thing. I had no control over that, but if I stopped smoking, I could control how I was going to react if I was ever in the hospital.

This shift in paradigm to viewing smoking as distasteful and the resultant image conflict created in those who continued to smoke created a powerful impetus to quit.

One individual began contemplating quitting for an entirely practical reason; the increasing cost of cigarettes. A price increase in cigarettes prompted her to examine the annual cost of cigarettes. After determining it was equal to one house payment, she and her husband consciously decided that smoking was just too expensive.

Most women reported internal motivation to quit smoking. Three of the 12, however cited an external motivator as the primary and in some cases solitary trigger for their cessation. Alice, a smoker of 50 years was unable to quit even after undergoing bypass surgery and a lengthy hospital stay. She was prompted to quit, however, when her physician informed her that if she continued smoking she needed to find another doctor. She describes her response to this threatened loss of her revered physician: "I said 'no I won't do that because you're the best doctor I've ever had'....I just did not want to face another doctor". Two other individuals quit in response to pressure or disapproval from a significant individual. In one woman, the entreaty to quit came from her father, who had lost his wife to a smoking-related illness, and feared losing his only child as well. In the

other instance, the individual's nine year-old daughter implored her to quit smoking because she viewed cigarettes as drugs. In all these women, external motivators served as powerful cues to action. Maintenance of cessation, and acceptance of becoming a non-smoker varied among these externally motivated individuals and will be discussed later.

Once the seed of contemplation was planted, women began evaluating the pros and cons of smoking cessation. The length of contemplation varied, but in 10 cases out of 12, this stage lasted months to years. In two cases, individuals decided to quit and did so immediately, or within a day of deciding. Interestingly, both of these women were prompted to quit by an external individual. Their contemplation about their fait accompli came after the fact.

### Preparation

In the preparation stage, the individual combines intention with behavioral criteria (Prochaska, DiClemente, & Norcross, 1992). Individuals in this stage had decided to quit and were taking steps toward that goal. They described symbolic behaviors such as destroying ashtrays or getting rid of stores of cigarettes. Some sought assistance by purchasing nicotine patches, obtaining physician orders for Zyban, or enrolling in cessation programs. Some, especially those enrolled in cessation programs, began to make small but significant changes in their smoking behavior. They placed self-imposed restrictions on when and where they could smoke and began to cut down on the number of cigarettes they smoked in a day. Others did not change their smoking habits until the day they quit. One of the women who quit instantly upon contemplation went through a cognitive preparation and engaged in the typical symbolic behavior of destroying ashtrays

and cigarettes during the day after she quit, strengthening her resolve to sustain her cessation.

All women who described deliberate preparation for cessation, set a target quit date. In addition to the preparation already described, they worked to become wholly prepared for the coming action of cessation. Analysis of their decision, and firming their emotional resolve are cited as important measures. This quote by Barbara exemplifies this preparation:

Actually I was still smoking when I went to Nicotine Anonymous. I spent two or three weeks in there before I picked out a quit date. I wanted that two or three weeks to prepare myself mentally. You have to work up to it emotionally, mentally, spiritually.

### Action

Action is a stage in which individuals overtly modify their behavior (DiClemente, Prochaska, & Norcross, 1992). During the action stage, individuals actually cease to smoke. Although the change behavior is most visible during this stage, it is important to recognize that the action stage is the culmination of extensive contemplation and cognitive preparation. Most individuals in this study who decided to quit report being ready to do so.

During the action phase, women reported a gamut of physical and emotional reactions and experiences. Although many dreaded the actual cessation and had trepidation about severe discomfort, only two reported being severely uncomfortable. Ten out of 12 felt prepared to cope with the experience, and found it hard, but less unpleasant than anticipated. These individuals reported withdrawal symptoms such as irritability,

restlessness, headaches, and cigarette cravings. Their use of coping strategies, however served to control the severity of their symptoms and made them manageable. Use of coping mechanisms is a major emergent theme in this study. The following quote illustrates the struggle women experienced, during the arduous process of quitting. It also elucidates the use of mental and behavioral coping strategies to temper their discomfort and bolster their success. Ronnie, a smoker of 38 years who utilized affirmation tapes and wellbutrin as cessation aids shares her experience:

I remember thinking that I would either have to totally accept not smoking or I knew it was really going to drive me nuts. The first days I tried to follow what was on the tapes as far as positive affirmations. I did a lot of those. I did a lot of deep breathing, a lot of water. I tried to continually compliment myself, pat myself on the back for doing such a good job. And the combination of all those things made it not as difficult. [I thought] if I'm going to go into this thinking it's going to be this hard, I'm never going to make it.

A specific coping strategy utilized by 7 of the 12 women was substitution of an alternative behavior for smoking. In some cases this was a deliberate action. Karla describes how walking helped her to maintain her smoking cessation:

It's good for your head. If anything it helps you with the anxiety you have when you quit smoking. It burns off some of that anxiety and gives you a goal. I gives you something to replace it with.

Others substituted food, although not deliberately. Janet shares her use of sunflower seeds as a mechanism to remain abstinent, "I don't think I could have done it without the sunflower seeds. I carried them everywhere with me. Pockets full of



sunflower seeds...Not a good replacement. I gained lots of weight”. Other women describe substitution of food and weight gain. Although they were not happy with the weight gain, it did not deter them from their resolve to remain abstinent. They viewed weight loss as another goal to pursue. Ronnie had this comment, “ I think I had to find substitutes. Unfortunately it was food for me and that’s why I’m doing Weight Watchers....I’m a chocoholic and so it was easy to just transfer it. You know chocolate for cigarettes”.

Two women utilized an unusual coping strategy; postponement. Unable to face letting go of cigarettes, they coped with their abstinence by telling themselves they haven’t really quit. Theresa explains this strategy: “I think that’s what helped me quit smoking is I thought I’m not a nonsmoker. I’m just in between cigarettes now....I have cigarettes. I don’t smoke them, but I know they’re there. So I think mentally you don’t have the discomfort because you’re not quitting”.

Another common coping strategy was manipulation of the environment. In most situations this included staying away from situations where they were accustomed to smoking or where other people were smoking. One individual quit drinking coffee until she was through the initial withdrawal symptoms, because she didn’t think she could drink coffee without having a cigarette. The majority of women got rid of cigarettes and made sure they had no ready access to cigarettes. Two took a different approach to remaining in control. They intentionally kept cigarettes. Here Alice, who quit smoking through a cessation program presents her approach to taking cigarettes head on:

In the program they tell you to make your house a smoke-free house. Well I didn’t do that. I kept a pack of cigarettes for over a year. That was a challenge to me.

You can't have that cigarette. Don't do it. I'd argue, I'd fight myself.... I'd cuss it out [the cigarette]. I'd talk to it. I'd say, "I don't need you. I don't want you. Go away".

The three individuals who quit through a smoking cessation program utilized a 12-step "one-day-at-a-time" approach to maintaining cessation. All women participating in this study had reached the 12<sup>th</sup> step, "bringing the message to others". One had actually become a smoking cessation counselor. Another had become a volunteer and spent her free time evangelizing. She exhilarated in her accomplishment and extolled the benefits of smoking cessation to friends and strangers alike. She rode the bus 10 miles every day to volunteer at a smoking cessation clinic and credited her guidance for eliciting smoking cessation in at least six bus drivers. Another was writing the newsletter for a smoking cessation organization. All professed the value of the program, and the gratification they received from participating and helping others to quit smoking.

Most women experienced some degree of difficulty during the action phase, but both extremes of ease of cessation were represented from very easy to extremely difficult. Four individuals reported being able to quit with relative ease. Two of these women had significant smoking histories, smoking over a pack-per-day for greater than 35 years. They themselves were surprised at their experience. One stated, "All I heard from people [is] how hard it is to quit and I thought it was going to be really horrible and I was going to be a basket case. It wasn't. It was really easy". One of these women used nicotine replacement patches for three weeks, the other used no traditional aids. There was no explanation disclosed in these interviews accounting for these hard-core smokers ease of cessation. The other two who described their action as relatively easy were binge smokers

who smoked heavily on some days, while not at all on others. They differed, therefore, from the other smokers who had regular daily habits. While both described some urges to smoke, both reported quitting with little effort. One of these women commented, “ No big deal. I just quit. I don’t have to do a patch or cut my cigarettes down or anything like that. I just quit”.

At the other extreme, two individuals described the cessation experience as very laborious and agonizing. Both of these women quit without nicotine replacement or wellbutrin. Additionally, both quit in response to external prompts rather than being internally motivated. This quote from Janet epitomizes the depth of their discomfort: “It was terrible. I had stomachaches, cried, [was] restless, almost like those drug withdrawals I saw on TV. It really was a very unpleasant experience, physically and emotionally”. It should be noted that more so than other subjects, this woman’s leisure habits included spending time in environments where smoking was prevalent, and socializing with several smoking friends. She was therefore forced to make significant changes to avoid being constantly faced with triggers to smoke. She describes the lifestyle alterations she made to enable her to quit smoking, “ I couldn’t go near a casino. It was very difficult especially during those first two months to go near those places because it was so conducive to smoking....I chose my friends very differently and tried not to put myself in any situation that would allow me to smell them [cigarettes] because they still smell good”.

### Maintenance

During the maintenance stage, individuals work to prevent relapse and sustain their non-smoking status. The criteria for being in maintenance includes being free of the

addictive behavior and engaging in new behaviors incompatible with the addictive behavior. Prochaska, DiClemente, & Norcross, 1992). Individuals who have abstained for six months are assumed to be in maintenance. During maintenance, women described being past most of their discomfort, and despite occasional urges to smoke, are generally comfortable without cigarettes. They have adapted to smoking cessation, and the effort no longer dominates their life. Eleven out of 12 women classified as maintainers by this definition, since all have passed six months of abstinence. One subject who quit eight months ago, had a lapse six weeks ago where she smoked three cigarettes, so has not yet met the criteria for being in maintenance, but is still in action.

Eight of the 11 subjects who are in maintenance view themselves as non-smokers and accept their life without cigarettes. They generally no longer need to avoid certain high risk situations as they had to during the action phase. They recognize that urges to smoke will occur and are capable of resisting them without significant effort. Some reaffirm their non-smoker status daily, but it has ceased to be a struggle. This attitude of acceptance and peace are best expressed by this participant's statement: "I think that's all a part of stopping smoking for me. Just accepting that I can do it. Accepting that sometimes there are going to be situations that are difficult and which way do you want to handle them?"

Three of the 12 subjects, although they fit the chronological criteria for maintenance, seem to lack the mental transition and commitment evidenced in the others. Two of these refuse to identify themselves as non-smokers. They claim they are merely postponing smoking indefinitely. Although one has been abstinent for two years, and one for three, it seems that this unwillingness to let go of smoking does not conform to the

intended spirit of the maintenance stage. Rather these individuals are in a state of extended action. This cognitive and affective difference evident among subjects is not explained within the Stages of Change Model, and will be discussed as a separate theme later.

Finally, one other subject reports a continued “daily battle” to stay off cigarettes despite two years of complete abstinence. She maintains her cessation through sheer willpower rather than an actual desire to be a non-smoker. She frequently misses cigarettes and says she would, “be first in line to buy them” if new evidence revealed cigarettes to be safe. Again, this individual appears to remain in the action phase, although by chronological definition she is in maintenance.

#### Pender’s Health Promotion Model

The Transtheoretical Model of Change was utilized as a framework because it considers the dynamic nature of smoking cessation as a process rather than a single event. Additionally, Pender’s Health Promotion Model (HPM) was utilized because it emphasizes health promotion and the factors that influence or motivate individuals to engage in health-promoting behavior such as smoking cessation. This model compliments the Stages of Change Model because it emphasizes factors which initiate the change process and sustain the individual through a successful behavior change. The HPM describes a variety of cognitive, affective, personal, interpersonal, and situational influences that affect health-promotional behaviors.

Findings revealed evidence of all concepts within the HPM, although specific sub-

themes relative to smoking cessation predominated. The following discussion will highlight findings reflecting each HPM concept.

### Prior Related Behavior

According to Pender, the best predictor of behavior is the frequency of the same or similar behavior in the past. Prior similar behavior is reported to be a source of skill and self-efficacy development. (Pender, 1996). In the case of smoking cessation, prior related behavior implies a previous quit attempt. All 12 women had at least one prior quit attempt, and in some cases, had quit for a length of time and then relapsed. This concept is applicable in one respect. Some described making progress toward cessation skills during previous cessation attempts, even if the attempt ultimately failed. For example, Barbara reports this example of sustained benefit from a previous cessation episode:

That year I quit, I got rid of the mentality of smokers. That is I can drink coffee or drink anything and I don't have to have a cigarette with it. When I get in the car, I don't want a cigarette. It no longer triggers a mechanism that makes me want to smoke again.

This concept does not account for the fact that many individuals with multiple previous unsuccessful attempts have been successful during this current attempt, because unsuccessful cessation attempts are unlikely to build confidence or efficacy. It's possible that women were able to look at previous unsuccessful attempts to identify ineffective strategies, or it may be necessary to apply another concept to this phenomenon.

### Personal Factors

Personal factors, to the HPM, include biologic, psychologic, and sociocultural factors pertinent to the target behavior, in this case smoking cessation, that may directly

influence the behavior. Personal factors emerging as significant to this population included age, health status including fear of loss of independence, cosmetic issues, and cost of cigarettes. Karla's statements illustrate three of these factors:

I was near fifty and I was getting older.... I felt it [continued smoking] was going to kill me....I didn't have the energy to do the things I did before.... I wanted to be 70 and healthy and to be able to have some activity in my life.... I didn't like the wrinkles I was getting around my lips. Linda identifies the high cost of cigarettes as her primary motivation for quitting: " It was after a price increase in cigarettes. We calculated how much it was on a yearly basis and decided it had just gotten too expensive".

Four other subjects mentioned cost as a personal factor although none were primarily motivated by this factor to quit.

#### Perceived Benefits of Action

According to Pender (1996), one's plan to engage in a particular health-promotional behavior often depends on anticipated benefits or outcomes that will occur as a result of the action. Individuals are more likely to engage in a behavior they perceive will result in positive outcomes. As discussed in association with contemplation, perceived benefits of smoking cessation did serve as a motivational factor for some subjects. The majority of women however, wanted to quit smoking primarily because the habit had become intolerable, not due to anticipated benefits associated with non-smoking. This image conflict was discussed in conjunction with contemplation. It represents behavior aimed at avoiding a negative state rather than approaching a positive state. A predominance of avoidance rather than approach behavior does not support the

role of perceived health benefits of smoking cessation as a primary motivator in this group of women.

Although perceived benefits of action did not serve as a major source of motivation to initiate change, all individuals sought evidence of benefits associated with cessation to reinforce and sustain their decision to quit. Perceived benefits, therefore, contributed to maintenance of cessation in these subjects although not to contemplation. Additionally, many discovered unanticipated benefits, which served to strengthen their resolve. Perceived health benefits recognized by most women included increased energy and exercise tolerance, fewer upper respiratory infections, and enhanced sense of smell. Notably, 4 subjects noticed no change in their health after quitting. Additional benefits included feeling in control, and greater comfort in non-smoking environments. Finally women mentioned the aesthetic benefit derived from elimination of the odor of cigarette smoke on their clothes, homes, cars, and persons. Interestingly, most claimed that the smell did not become offensive until they contemplated quitting. The following quotes illustrate typical perceived benefits of smoking cessation. Susan exclaimed, “Oh I can go climbing. Just last weekend I went climbing with my kids....Two years ago I would not have been able to....Stopping smoking really helped my health.” Erica asserted, “ Now that I don’t smoke, traveling is so much easier. We just went to Tahiti in January and we were on the plane for eight hours. No problem. The ship we were on, all no smoking. So it opens more doors for you”. Linda has this comment about aesthetics, “ When somebody comes in off the patio and they stink of smoke, I think I sure am glad I don’t stink of smoke. So I’m just real glad that I don’t.” Finally, Ronnie declared, “I regained control of how I live my life”.



### Perceived Barriers to Action

Barriers consist of perceptions concerning blocks, hurdles, and personal costs associated with undertaking a particular behavior (Pender, 1996). While perceived benefits support behavior, perceived barriers tend to deter behavior. Perceived barriers found in this study included (a) addiction to nicotine, (b) stress and (c) proximity to significant others who smoke, or environments that trigger urges to smoke.

Addiction to nicotine was perceived as a barrier to cessation by all but one woman. Theresa elucidates the perceived loss of satisfaction associated with giving up cigarettes: “ I loved to smoke. It’s relaxing. It’s enjoyable. It’s almost like heroin. It’s like a monkey on your back”. Women also report a loss of the respite they got by taking a break to have a cigarette. They report that they are less likely to take a break while working on a project and miss the quiet time afforded by stopping to have a cigarette. All described at least occasional and some frequent cravings to smoke associated with their addiction. Alice describes this experience of longing for a cigarette: “ Oh I want to have a cigarette. The addiction is still there. I’d love just to get a whiff of that cigarette and oh God that would taste so good”.

Stress is identified a major barrier to continued cessation. All were tempted to smoke when faced with stressful situations. Erica describes this best: “ Every time you experience a stress you think about a cigarette. If people tell you differently, they’re lying”.

Finally, proximity to a significant individual who is smoking, or an environment that triggers urges to smoke are described as barriers to cessation. Three women either live with or socialize frequently with individuals who smoke in their presence. They

identify these interludes as the greatest hindrance to continued cessation. Heather recounts her experience when her mother, a smoker visits her for several months of the year: “When she’s smoking and we’re sitting up talking, I find myself wanting to smoke with her”.

Similarly individuals found that situations and environments where they were accustomed to smoking served as barriers to cessation. They identified situations such as having a cup of coffee, going to a bar or casino, drinking alcohol, or even driving in the car as triggers creating a desire to smoke.

### Perceived Self-Efficacy

Self-efficacy is one’s judgement of personal capability to accomplish a certain behavior (Pender, 1996). Past studies have linked higher self-efficacy with heightened success in smoking initiation and success. Although subjects in this study showed fierce determination, evidence of self-efficacy for continued cessation was weak in many. Of the 12 subjects, only 6 were able to declare with certainty that they would never smoke again. Even though all had met study criteria for successful cessation, it was common to hear comments like “I hope I will never start smoking again”. Some even projected scenarios they believed would trigger a relapse to smoking. Cynthia shares this thought, “If I were to have a lifestyle change, if I was going out with friends more or my husband and I got a divorce and I went out, I think that I would probably be tempted”.

### Activity-Related Affect

Activity-related affect refers to subjective feelings that occur in response to a behavior. Affect can be positive or negative. Behaviors associated with positive affect are likely to be repeated, while behaviors associated with negative affect are likely to be

avoided (Pender, 1996). Two affective responses predominated in this study: (a) grief and loss before, during, and in some cases after smoking cessation and (b) joy and fulfillment following a successful transition to non-smoker.

Seven of 12 women described grieving the loss of cigarettes. In some cases the grief occurred prior to actually quitting.: Karla's story illustrates this anticipatory grieving: I think I was more depressed before I quit than when I quit. The anxiety of knowing that I was doing it [made me] weepy and get sad. I knew it was going to be hard and I was going to be struggling with an issue and that maybe my life would seem kind of boring". The most dramatic recounting of cessation-associated grieving comes from Susan:

It was like letting go of a friend, a friend who was always there for me, always the same. I wrote a goodbye letter which took six weeks to write. I went through all the good times and all the bad times and it ended in the whole thing ended in a love affair that was not good for me. I filed this paper with my divorce papers from a previous marriage that ended pretty much the same way. They fit together.

Individuals who successfully traversed the stages of cessation reported feelings of joy and gratitude. Alice describes this feeling: "Every morning when I get up I say, 'this is another day. You haven't had a cigarette. Isn't this a gorgeous and wonderful feeling' ....It has made me feel like a fantastic person".

### Interpersonal Influences

Social norms, social support, and modeling are three interpersonal influences identified as influencing health-promotional behavior by Pender's (1996) HMP. All these themes are evident, with the influence of social norms and social support being most

strongly represented. The role of growing social norms against smoking has already been discussed as a factor creating feelings of stigmatization in some subjects. Social support was cited by most subjects as a strong factor supporting their ability to quit. Support came from a variety of sources. Three women reported simultaneous cessation by their husbands or significant others, and described the companionship and shared purpose as very beneficial. The three individuals enrolled in support groups extol their value as a source of social support. Alice portrays the value of group support:

You're in the group and say there's 10 people in the group and this one will tell why they quit smoking. And this one does smoke. You get all these 10 people in there and it's something this one person's going to say and it's going to trigger John over there to quit smoking. Or Ann's going to quit smoking because of what someone said. That's what group support's all about. It's about everyone sharing in everything, you know and educating them on what it's all about.

Other sources of social support were co-workers, friends and family members.

All shared stories of others expressing how proud they were of the individuals successful smoking cessation. Ronnie emphasized the importance of announcing your intention to quit smoking to others, to obtain their support.

I made it a point, I thought I'm going to tell everybody I meet that this is what my plan is....I'm going to look at it as my safeguard. These are the people that are doing it [supporting me] because they love me. They're going to help me through this. And if I don't make it this time, if I slip, I know they'll support me but they can't do it if they don't know what I'm going through.

After women had quit, most emphasized the importance of remaining empathetic

toward friends and family members who still smoked and not becoming judgmental. They mentioned experiences with reformed smokers who had become overzealous and obnoxious, and vowed not to become like that.

### Situational Influences

Situational influences represent environmental factors containing cues that trigger action (Pender, 1996). For example, a no smoking environment creates demand characteristics for non-smoking behavior. Several individuals mentioned non-smoking environments as contributing factors in their decision to quit smoking. Christine quit when her husband was diagnosed with cancer and she was required to spend long periods of time at a cancer institute where smoking was not allowed anywhere on the grounds. The discomfort associated with abstention became so uncomfortable that it induced her to quit smoking. Another subject cited a desire to travel more comfortably without worrying about smoking restrictions as a reinforcement of her decision to quit, although it did not serve as a primary motivator.

The opposing force, situational influences creating triggers to smoke, have been discussed as barriers to cessation.

### Commitment to a Plan of Action

The HPM outlines cognitive processes involved in effective commitment to a plan of action (Pender, 1996). This process includes plans to engage in specific behaviors irrespective of competing preferences. Additionally, this concept implies identification of definitive strategies for accomplishing a desired behavior. Most subjects exhibited commitment to the action of smoking cessation, although not all had a specific plan.

Women in this study had such fierce determination to succeed that the term commitment seems inadequate to describe their resolve. A more descriptive term would be unconditional resolve. Nine out of 12 subjects exhibited a resolve to quit superceding nicotine cravings, cues to smoke, or stressful situations. They were willing to face whatever comes up without the crutch of smoking a cigarette. Alice quit smoking after a 50-year habit. She struggled significantly, but has remained abstinent for two years and considers herself a non-smoker. She best asserts this unconditional resolve when she says, “I will say ‘no, I’m not going to smoke today. I didn’t smoke today and I’m not going to smoke tomorrow”.

#### Immediate Competing Demands and Preferences

Immediate competing demands and preferences refer to urges or situations that may derail intended behavior (Pender, 1996). In the case of smoking cessation, these parallel barriers and have already been discussed.

#### Additional Themes

One additional theme is prevalent throughout the smoking cessation process and emerges as important to continued maintenance. Nine of the 12 subjects underwent a transformation to non-smoker. Part of this process was cognitive, as subjects began to redefine smoking as an undesirable behavior. During the cessation process, they operationalized this redefinition in their own lives and began to view themselves as non-smokers. Subjects experienced not only a cognitive shift but also underwent a process of self-actualization. They celebrated their liberation from cigarettes. Susan says: “Part of my gratitude every morning is that I’m not a smoker. That is not something that I have to

do”. Transformed subjects feel a sense of pride and accomplishment. Barbara’s quote underlines the significance of this accomplishment, ““On my tombstone I want them to put ‘I quit smoking’”.

Three women did not manifest these cognitive and self-actualizing changes associated with transformation to non-smoker. Two were postponers, who claimed they hadn’t actually quit, but were merely indefinitely postponing their next cigarette. One of these individuals was quite entrenched in her smoking cessation habit. She had been abstinent for three years, kept no cigarettes, and rarely thought of smoking. She associated with mostly non-smokers including her husband who quit soon after she did. Still, she exhibited a demeanor of resignation about her smoking cessation, devoid of any joy. The other postponer did not seem as fortified against relapse. Although abstinent for two years, she constantly kept cigarettes, socialized closely with smokers, and reported recent temptations to smoke. The third woman was not postponing smoking, but still did not possess the mentality of a transformed smoker. She had quit suddenly, not for herself, but for her father. She remained quite angry both at tobacco companies for victimizing her into smoking as a teenager, and societal sanctions against smoking. Her concept of smoking had not changed, with cigarettes still smelling good. Cessation to her remained a daily struggle, even after two years.

### Summary

Findings provided a rich depiction of the smoking cessation experience. Progression through the stages of change from contemplation through maintenance was evident. During contemplation, motivational factors emerged. Cues to action and self

image conflict emerged as most prevalent during this stage, although some subjects reported being motivated by health and other factors. From Pender's HPM, personal factors such as age, health status, cost of cigarettes, and cosmetic and aesthetic issues came into play during this stage. Also from the HPM, perceived benefits of action, interpersonal and situational factors played a role in initiating contemplation of smoking cessation.

Preparation for cessation included obtaining nicotine replacement aids and prescriptions for wellbutrin in some subjects. Many reported ritualistic cleansing of their environments of cigarettes and other smoking paraphernalia.

During the action phase, subjects experienced varying degrees of discomfort and utilized coping strategies to assist in their cessation effort. Major coping strategies included substitution, avoiding trigger situations, self-talk and distracting behaviors. Addiction to nicotine, stress and proximity to significant other smokers emerged as significant barriers to cessation during this stage. Subjects universally exhibited an unconditional resolve not to smoke despite temptations.

As smokers moved into maintenance they had weathered coping with urges to smoke successfully and no longer experienced daily discomfort. The majority had undergone a transformation to non-smoker characterized by personal growth, celebration of liberation from cigarettes, and self-actualization.



## CHAPTER SIX

### DISCUSSION

This study elucidates the experience of 12 women who successfully quit smoking. This chapter will review and highlight major themes. Discussion of findings will be related to models and other literature. Study limitations will be discussed. Finally, implications for practice and directions for future research will be explored.

#### Summary of Major Themes

The core theme evolving from this study was transformation to non-smoker. Transformation to non-smoker represents the culmination of becoming motivated to quit and successfully traversing the stages of cessation, resisting temptations and growing to accept the loss of smoking. Transformation to non-smoker includes several important sub-themes. Motivation to quit was a key factor in initiating contemplation. Motivational concepts included self-image conflict, and cues to action.

When subjects reached the action stage, important sub-themes included barriers to cessation, primarily addiction to cigarettes, stress, and proximity to smokers and smoking environments. Coping mechanisms was another key concept during this stage assisting subjects to remain abstinent. Interpersonal influences played a role, either in supporting subjects in their cessation efforts, or in some cases serving as a barrier. Feelings of grief

and loss were prevalent during this stage of cessation. Finally, unconditional resolve emerged as a theme sustaining subjects through action to maintenance. During maintenance, subjects reached acceptance of their loss as they completed their transformation to non-smoker. Feelings of joy, liberation, and triumph predominated. (See Appendix A.)

## Discussion

### Relationship of Findings to Stages of Change

Findings support the Stages of Change Model as all stages were evident in the study. In 3 of the 12 subjects, the chronological criteria proposed for classification into the maintenance stage of cessation was not ideal. While these subjects had remained abstinent for much longer than the required six months, they had not undergone the cognitive and affective transformation to non-smoker evident in the majority of subjects. Prochaska and DiClemente (1991) do allow that during maintenance people continue to work to prevent relapse. There was such a dramatic difference among these individuals, all technically maintainers, that it is difficult to justify classifying them in the same stage.

Prochaska and DiClemente's stages of change represent the temporal, motivational, and constancy aspects of change (DiClemente & Prochaska, 1985). They also discuss a second dimension termed processes of change, which identifies activities and events used as coping mechanisms to modify smoking behavior. Evidence of these processes were utilized by these researchers when testing their stages of change model. These processes were not highlighted during pre-study research for this study. Instead, the researcher focused on the stages of change. In evaluation of findings, however, most of

these identified processes parallel coping strategies identified in this study. The 10 processes of change re: (a) Helping relationships, where an individual has someone to talk to about their smoking, (b) consciousness raising where information related to smoking is sought, (c) self-liberation which involves asserting one's ability to quit smoking, (d) self-reevaluation where dependence on cigarettes causes disappointment in oneself, (e) environmental reevaluation in which individuals become aware of polluting the environment, (f) counterconditioning which refers to substituting other method of relaxation, (g) stimulus control or removal of items which remind the individual of smoking, (h) reinforcement management whereby individuals are rewarded by others for not smoking, (i) dramatic relief, in which the individual is emotionally moved by warnings about health hazards of smoking, and j) social liberation where an awareness develops of non-smoking areas in public places. All of these processes, with the exception of dramatic relief, were echoed by subjects in this study. (Prochaska & DiClemente 1983) Accordingly, they are an important component of Prochaska and DiClemente's work and should be included when utilizing their framework. Some of Prochaska's and DiClemente's work includes a sixth stage in the change process, termination stage, individuals have complete confidence in their ability to sustain behavior change without fear of relapse (Prochaska & DiClemente, 1982). Inclusion of this stage would assist in differentiating individuals who are deemed maintainers by chronological criteria alone and those who have undergone the transformation to permanent behavior change.

#### Relationship of Findings to Pender's Health Promotion Model

Concepts from Pender's Health Promotion Model were supported by the findings

of this study. Pender differentiates between motivational characteristics of health promotion, which implies moving toward a desirable behavior, and health protection, which implies avoidance of negative events. She concludes, however that adult behavior is motivated partially by avoidance behavior as well as approach behavior. The majority of subjects in this study were motivated to quit to avoid what had become an intolerable habit, which is consistent with Pender's definition of health protection. At first glance, it would seem that since subjects were not motivated primarily by a quest for physical health, Pender's Model might not be applicable. If one compares findings however, to Pender's holistic definition of health, transformation to non-smoker as an actualizing behavior is consistent with subject's experience. Pender's definition of health is:

Health is the actualization of inherent and acquired human potential through goal directed behavior, competent self-care, and satisfying relationships with others while adjustments are made as needed to maintain structural integrity and harmony with relevant environments (Pender, 1996 p. 22).

This definition is descriptive of the subjects' experience. While their initial motivation was avoidance, their cessation journey elevated them in a holistic sense to higher levels of well being. Selected terms from Pender's classification system for affective and behavioral expressions of health include "Calm, joyous, exhilarated, having a sense of achievement, sense of achievement, and coping constructively" Pender, 1996 p. 23). These terms are certainly descriptive of subjects' experience of transformation to non-smoker.

Some of the individual characteristics as well as behavior-specific cognitions and affect described by Pender are evident in the findings of this study. A variety of personal

factors can be identified in initial contemplation. Perceived benefits of action were used by subjects to strengthen their resolve to remain abstinent. Perceived barriers to action are evident in subjects' discussion of their struggle to quit. Perceived self-efficacy was understated in study findings. Efficacy developed as a result of successful cessation, but did not emerge as a significant motivator to contemplation or action. Activity-related affect including grief during contemplation and action is apparent. Grief and loss was such a significant factor however, it could stand alone as a concept in itself. Additional affect emerging after successful cessation is joy and satisfaction. The role of interpersonal and situational influences both positive and negative were well represented. Immediate competing demands were present, in terms of subjects' conflict between desire to smoke and wanting to quit.

Pender's previous model included the concept "cues for action" (Pender, 1987). Cues for action are stimuli initiating certain behavior. She abandoned this concept in her revised model finding them difficult to identify and measure reliably (Pender, 1996). Cues for action emerged as significant motivating factors in this study. Possibly the qualitative nature of this study made these diverse stimuli more evident, or perhaps this concept as a motivator should be re-explored.

In retrospect, utilization of both models and fourteen concepts as preliminary codes proved excessively structured for this qualitative study. The discussion of data in relation to each preliminary concept was laborious for both the researcher and the reader, and did not add to the discovery of significant themes. Pender's model, while supported, is general enough to apply to any type of behavior change and is not specific to smoking cessation. The Transtheoretical Model of Change was developed in conjunction with

smoking cessation research. It was very valuable to view subjects' experience within the dynamic framework of the change process. Utilization of the change model alone would have allowed more clarity of emergent themes.

Additional emergent themes not described by either model are image conflict and transformation to non-smoker. Similar concepts have been identified in other qualitative studies. These findings will be discussed in greater detail

#### Relationship of Findings to Smoking Cessation Literature.

This study revealed many similarities to findings from the two other qualitative studies describing the experience of successful smoking cessation, and also some differences. Brown (1996) used grounded theory to evaluate the smoking cessation experience of older adults. Her findings revealed that subjects redefined themselves as non-smokers. Subjects reported many of the same motivators, including redefining smoking as undesirable, recognizing changing social norms, and becoming committed to changing. Subjects differed in Brown's study, in that they cited fear of illness as a primary motivating factor. Perhaps the older mean age of 67 accounts for this difference in experience.

Puskar studied the experience of smoking cessation in women (Puskar, 1995). She derived four themes from her findings: a) Evolving commitment to health and personal growth, b) being stigmatized, c) changing conceptualization, and d) smoking cessation as a relational phenomenon. The majority of Puskar's subjects identified health and a desire to move toward healthier lifestyle choices as their primary motivator. This finding differs from this study, where subjects cited an avoidance-based rationale for quitting. Perhaps demographic variables account for the difference between study results. Puskar's subjects

ranged in age from 26 to 42, a generally younger population. Mean years of smoking in her sample was 14.1, compared to 32.6 in this study. Other demographic differences may be present, but a complete comparison is not possible given the available data. Puskar identified feelings of stigmatization in 7 out of 10 subjects. Stigmatization was similarly reported in this study, but only by 5 out of 12 subjects. Perhaps differences in self-confidence and sensitivity to outside sanctions account for the difference in frequency of this theme. Again, these psychological traits were not measured in either group. Another major theme revealed in Puskar's study is smoking cessation as a relational phenomenon. Nine out of 10 women in her study expressed feelings of anger in disgust toward others who continued to smoke, tempered in some cases by empathy. In this study, however, all subjects felt empathetic accepting toward others who smoked, although many found the habit disagreeable. They continued their relationship with friends and family who smoked and most verbalized the importance of making these smokers comfortable, even to the point of allowing them to smoke in their homes. Puskar's finding that her subjects changed their conceptualization of smoking supports the process of transformation to non-smoker.

Findings also support the clinical practice guidelines based on key quantitative smoking cessation research. Nicotine dependence, environmental risks, and stress, key barriers reported by study subjects, are reflected in Clinical Guidelines from the AHCPR (U.S.DHHS, 1996) and supported by other researchers (Macnee& Talsma, 1995). All study subjects exhibited high motivation and readiness to change, supporting the AHCPR contention that low motivation and readiness are associated with lower cessation rates. The only variable not well supported in this study was self-efficacy. Subjects were highly

motivated to quit, and fiercely determined, but didn't, as a group, demonstrate strong self-efficacy. The reason for this difference is unclear. The other factor cited by the AHCPR as predictive of lower cessation rates was psychiatric comorbidity. Concomitant psychiatric conditions were not addressed during this study, except to choose non-institutionalized, functional adults as study participants.

### Conclusions

The findings of this study allow the extrapolation of a typical smoking cessation experience, which will be recounted utilizing a hypothetical woman named Mary. Mary has smoked a pack of cigarettes each day for 20 years. She quit once before several years ago, on a bet, but resumed smoking after two weeks. Five years ago, her office converted to a non-smoking office. Mary and the other two smokers in the office typically go outside the back door to smoke. Lately, Mary has received disgruntled glances from non-smoking employees who had to answer her phone while she was out smoking. She feels guilty about her more frequent breaks. Mary is becoming aware of the increasing cost of cigarettes. She felt sickened yesterday morning when she got up caught a glimpse of an unemptied ashtray, overflowing with cigarettes. She's noticing more wrinkles around her eyes and lips.

Suddenly, the other two smokers in Mary's office decide to quit. Mary finds herself smoking alone outside in the rain. She decides this is ridiculous. In the upcoming weeks her resolve is strengthened by encouragement from her sister who previously quit. She develops a heightened awareness for non-smoking advertisements and messages. Mary gets a prescription for Zyban from her physician, sets a quit date, gets rid of her ash trays, smokes her last cigarette and quits smoking.



Mary has a constant headache for three days. She is restless and feels irritable. Some days she has difficulty getting out of bed, she feels so depressed and sad. She misses cigarettes like a lost friend. Following her sister's advice, she begins walking every day after work. She stays away from friends who smoke. She scrubs all her floors. She copes with urges to smoke by taking deep breaths, drinking water, or doing something else. Soon they become less and less frequent. Three weeks after quitting, Mary has a bad day at work, which culminates with an argument with a co-worker. Driving home, she passes a convenience store and seriously contemplates buying a pack of cigarettes and smoking "just one". She fights this urge, calls her sister, and recommits herself to cessation.

As the days turn into months, Mary begins to feel better. She no longer becomes winded when walking. Her sense of smell improves. The odor of cigarette bothers her and she feels a deep relief and gratitude that she was able to quit. When she goes to a restaurant, she says, "non-smoking please" proudly. Mary has become a non-smoker.

### Study Limitations

Several limitations exist in this study. The sample was not representative of a cross section of the general population of women. All women were Caucasian, primarily middle aged women. Additionally, the study was conducted in a southwestern urban environment in a state with a very high smoking level. Minimal demographic data was collected. Subjects were not evaluated for level of addiction or other factors which could account for differences in ease of cessation. One subject did not strictly fit the criteria for cessation because she had a short-term lapse within the six-month interval. Two subjects were binge smokers and did not smoke on a daily basis. Their intermittent smoking habit

could account for differences in cessation experience. The women who had quit for two years or less had better recall of their cessation experience. Those nearing three years after cessation did not recall the experience as vividly.

### Implications For Practice

The results of this study have implications for nurses and other health care professionals. This study identified the important role of motivation and determination in successful smoking cessation. Nurses can encourage their clients to begin to cognitively evaluate the negative factors associated with smoking, as well as the positive factors associated with cessation. Nurses and others can encourage clients with the eventuality of the positive feelings associated with transformation to non-smoker. This “light at the end of the tunnel” could provide hope and relief for smokers undergoing the discomfort of initial cessation.

At least one woman quit directly as a result of an ultimatum by her physician. This underlines the importance of recommendation of smoking cessation by health care providers at every opportunity.

Study findings imply that social influences as well as increasing costs of cigarettes are influencing women to stop smoking. It may be an indication that formal restrictions are effective in discouraging smoking. It stresses the need for health care providers to campaign for smoking restrictions and deterrents.

### Recommendations For Further Study

This study demonstrates that qualitative research can identify gaps in findings even in topics that have been studied extensively, such as smoking cessation. Further qualitative studies are needed in this area. Interviewing subjects during the actual process of cessation, and in each stage of cessation, would reveal more detailed information about each stage. Additional research focused on men, and on other cultural groups are also needed. A longer-term study evaluating the maintenance of smoking cessation for several years would be helpful. Especially valuable would be a study evaluating the differences between individuals who demonstrate the cognitive and affective transformation to non-smoker as opposed to those who are abstinent by action only in terms of long term success. Development of an instrument measuring transformation to non-smoker would be useful.

## REFERENCES

- Bauman, K.E., & Flewelling, R.L. (1991). Parental cigarette smoking and cognitive performance of children. Health Psychology, 10 (4), 282-288.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. Psychological Review, 84 (2), 191-215.
- Brown, J.M. (1996). Redefining smoking and the self as nonsmoker. Western Journal of Nursing Research, 18 (4), 414-428.
- Crabtree, B.F., & Miller, W.L. (1992) Doing qualitative research. Newbury Park: Sage.
- DiClemente, C.C. (1981). Self-efficacy and smoking cessation maintenance: a preliminary report. Cognitive Theory and Research, 5 (2), 175-187.
- Fiore, M.C., Novotny, T.E., Pierce, J.P., Giovino, G.A., Haziandreu, E.J., Newcomb, P.A., Surawicz, T.S., & Davis, R.M.(1990). Methods used to quit smoking in the United States: do cessation programs help? . JAMA, 263 (20), 2760-2756
- Fiore, M.C., Pierce, J.P., Remington, P.L., & Fiore, B.J.(1990). Cigarette smoking: the clinician's role in cessation, prevention, & public health. Disease-a-Month 36, 181-242.
- Fiore, M.C., Novotny, T.E., Pierce, J.P., Haziandreu, E.J., Patel, K.M., & Davis, R.M.(1989) Trends in cigarette smoking the United States: The changing influence of gender and race. JAMA, 261, 49-55.

Ginsberg, J.P., Klesges, R.C., Johnson, K.C., Eck, L.H., Meyers, A.W., & Winders, S.A. (1997). The relationship between a history of depression and adherence to a multicomponent smoking-cessation program. Addictive Behaviors, 22 (60), 783-787.

Glassman, A.H., & Covey, L.S. (1996). Smoking and affective disorder. American Journal of Health Behavior, 20 (5), 279-285.

Hughes, J.R. (1992). Tobacco withdrawal in self quitters. Journal of consulting and Clinical Psychology, 60, 689-697.

Hymowitz, N., Meuller, M.D., Lynn, W.R., and Thompson, B. (1995) Background for a comprehensive community-based trial for smoking control. In Community Based Interventions for Smokers - The Commit Field Experience [Smoking and Tobacco Control Monograph No. 6] National Institutes of Health, National Cancer Institute.

Jensen, P.M., Coombs, R.B. (1994). Health and behavioral predictors of success in an intensive smoking cessation program for women. Women & Health, 21 (1) 57-71.

Kandel, D.B., Wu, P., & Davies, M. (1994) Maternal smoking during pregnancy and smoking by adolescent daughters. American Journal of Public Health, 84 (9), 1407-1413.

Kottke, T.E., Battista, R.N. , DeFries, G.H. , & Brekke, M.L. , (1988). Attributes of successful smoking cessation interventions in medical practice: a meta-analysis of 39 controlled trials. JAMA, 259 (19), 2883-2889.

Kowalski, S. (1996, April). Predictors of Success in smoking Cessation. Paper presented at the meeting of Zeta Kappa Chapter, Sigma Theta Tau, Las Vegas, NV.

Lichenstein, E., & Glasgow, R.E. (1992). Smoking cessation: what we have learned over the past decade. Journal of Consulting and Clinical Psychology, 60 (4), 517-527.

Lincoln, Y.S., & Guba, E.G., (1985). Naturalistic inquiry. Beverly Hills: Sage.

Macnee, C.L., & Talsma, A. (1995). Predictors of progress in smoking cessation. Public Health Nursing, 12 (40, 242-248.

Macnee, C.L., & Talsma, A. (1995) Development and testing of the barriers to cessation scale. Nursing Research, 44 (4), 216-219.

McBride, C.M., Pirie, P.L., & Curry, S.J. (1992). Postpartum relapse to smoking: a prospective study. Health Education Research, 7 (3), 381-390.

Melnik, K.A. (1988). Barriers: A critical review of recent literature. Nursing Research, 37, 196-201.

Miles, M.B., Huberman, A.M. (1994). Qualitative data analysis (2nd. Ed.), Thousand Oaks, California: Sage Publications.

Nelson, D.E., Kirkendall, R.S., Lawton, R.L., Chrisomon, J.H., Merritt, R.K., & Giovino, G.A. (1990) . Surveillance for smoking attributable mortality and years of potential life lost by state - United States. MMWR Morbidity Mortality Weekly, 43, 1-7.

Newhouse, P.A., & Hughes, J.R. (1991). The role of nicotine and nicotinic mechanisms in neuropsychiatric disease. British Journal of Addiction, 86, 521-526.

Parazzini, F. , Davoli, E. , Rabaiotti, M. , Restelli, s. , Stratmare, L. , Dindelli, M., La Vecchia, C. , & Fanelli, R. (1996). Validity of self-reported smoking habits inpregnancy: a saliva analysis. Acta Obstet Gynecol Scand, 75 (4) 352-354.

Pender, N.J. (1996). Health promotion in nursing practice (3rd ed). Stamford, CT: Appleton & Lange.

Pender, N.J. (1987). Health Promotion in Nursing Practice (2nd ed). Norwalk, CT: Appleton-Century-Crofts.

Pomerleau, C.S. (1996). Smoking and nicotine replacement treatment issues specific to women. American Journal of Health Behavior, 20 (5) 291-299.

Prochaska, J.O., & DiClemente, C.C. (1984). The transtheoretical approach: crossing traditional boundaries of change. Homewood, Ill: Dow Jones-Irwin.

Prochaska, J.O., & DiClemente, C.C. (1983). Stages and process of self-Change of smoking: Toward and integrative model of change. Journal of Consulting and Clinical Psychology, 51 (3) 390-395.

Prochaska, J.O., & DiClemente, C.C. (1982). Transtheoretical therapy toward a more integrated model of change. Psychotherapy: Theory, Research and Practice, 19(3), 276-287.

Prochaska, J.O., DiClemente, C.C., & Norcross, J.C. (1992). In search of how people change. Homewood, Illinois: Dorsey Press.

Prochaska, J.O., Velicer, W.F., DiClemente, C.C., & Fava, J. (1988). Measuring process of change: Applications to the cessation of smoking. Journal of Consulting and Clinical Psychology, 56 (4) 520-528.

Prochaska, J.O., & Goldstein, M.G. (1991) Process of smoking cessation: implications for clinicians. Clinics in Chest Medicine, 12 (40), 727-735.

Puskar, M. (1995) Smoking cessation in women: findings from qualitative research. Nurse Practitioner, 20 (11), 80-89.

Romans, S.E., McNoe, B.M., Herbison, G.P., Walton, V.A., & Mullen, P.E. (1993). Cigarette Smoking and psychiatric morbidity in women. Australian and New Zealand Journal of Psychiatry, 23, 399-404.

Rosenstock, I.M. (1974). Historical origins of the health belief model. Health Education Monographs, 2, 328-335.

Shiffman, S. (1979). The tobacco withdrawal syndrome. NIDA Research Monograph, 23, 158-184.

Svikis, D. S., Hatsukami, D. K., Hughes, J. R., Carroll, K. M., Pickens, R.W. (1986). Brief report: Sex differences in tobacco withdrawal syndrome. Addictive Behaviors, 11, 459-462.

Stewart, M.J., Gillis, A., Brosky, G., Johnston, G., Kirkland, S., Leigh, G, Persaud, V, Rootman, I., Jackson, S., & Pawliw-Fry, B.A. (1996). Smoking among disadvantaged women: causes and cessation. Canadian Journal of Nursing Research, 28 (1), 41-60.

U.S Department of Health and Human Services (1996) Clinical Practice Guidelines for Smoking Cessation. Public Health Service Agency for Health Care Policy and Research: Rockville MD(AHCPR Publication No. 94-0075).

U.S Department of Health and Human Services (1995). Healthy people 2000: midcourse review and 1995 revisions. Washington DC.

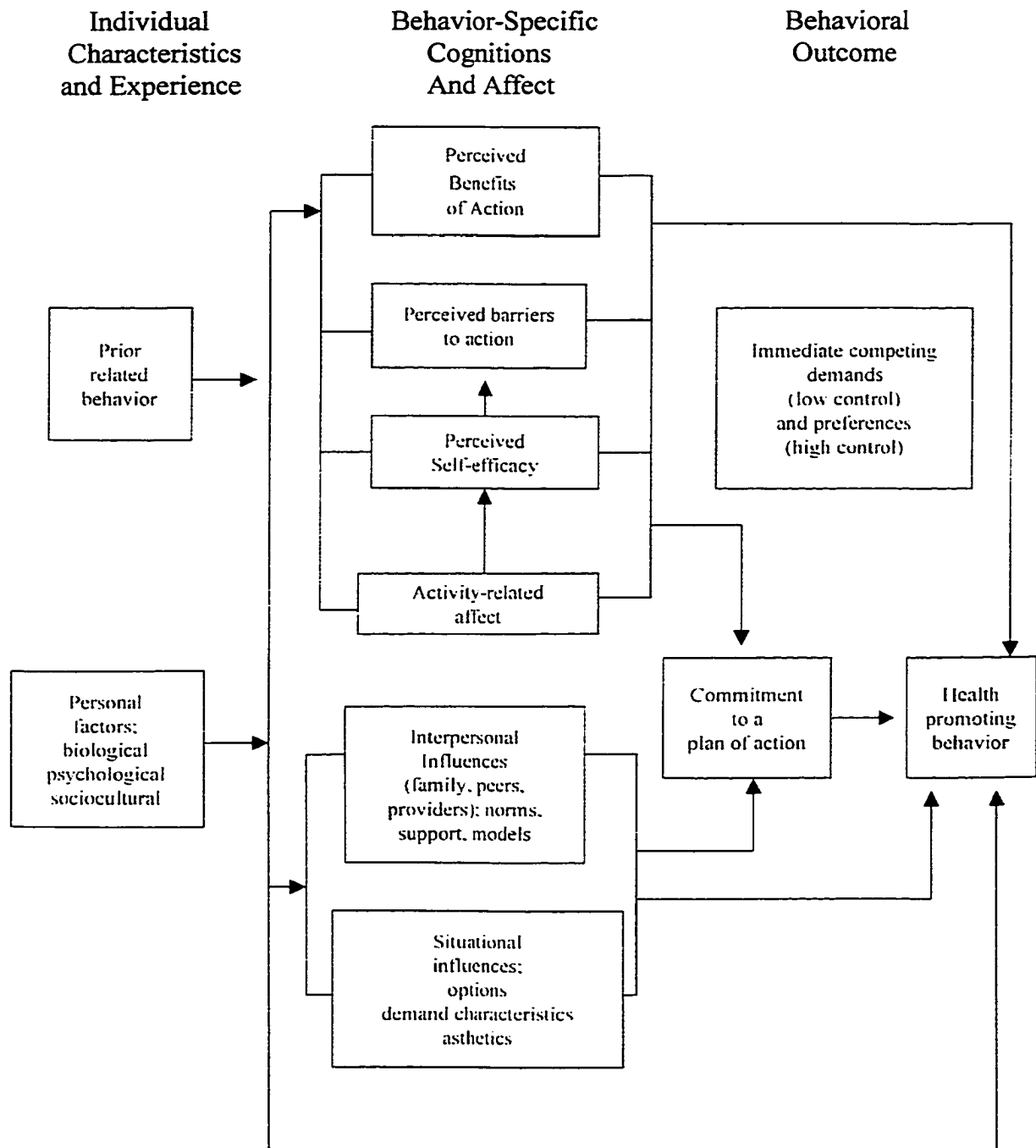


U.S. Department of Health and Human Services (1990). Healthy People 2000: national promotion and disease prevention objectives (DHHS publication No. PHS 91-50212 Washington, DC: US Government Printing Office.

U.S. Department of Health and Human Services (1988) The Health Consequences of Smoking: Nicotine Addiction: A Report of the Surgeon General. U.S Public Health Services, Center for Disease Control Publication 88-8046 Rockville, MD.

## **APPENDIX A**

### **Figures**



**Figure 1. Pender's Revised Health Promotion Model**

**Note:** From *Health Promotion in Nursing Practice* (p.67), by N.J. Pender, 1996, Stamford CT: Appleton & Lange. Reprinted with permission.

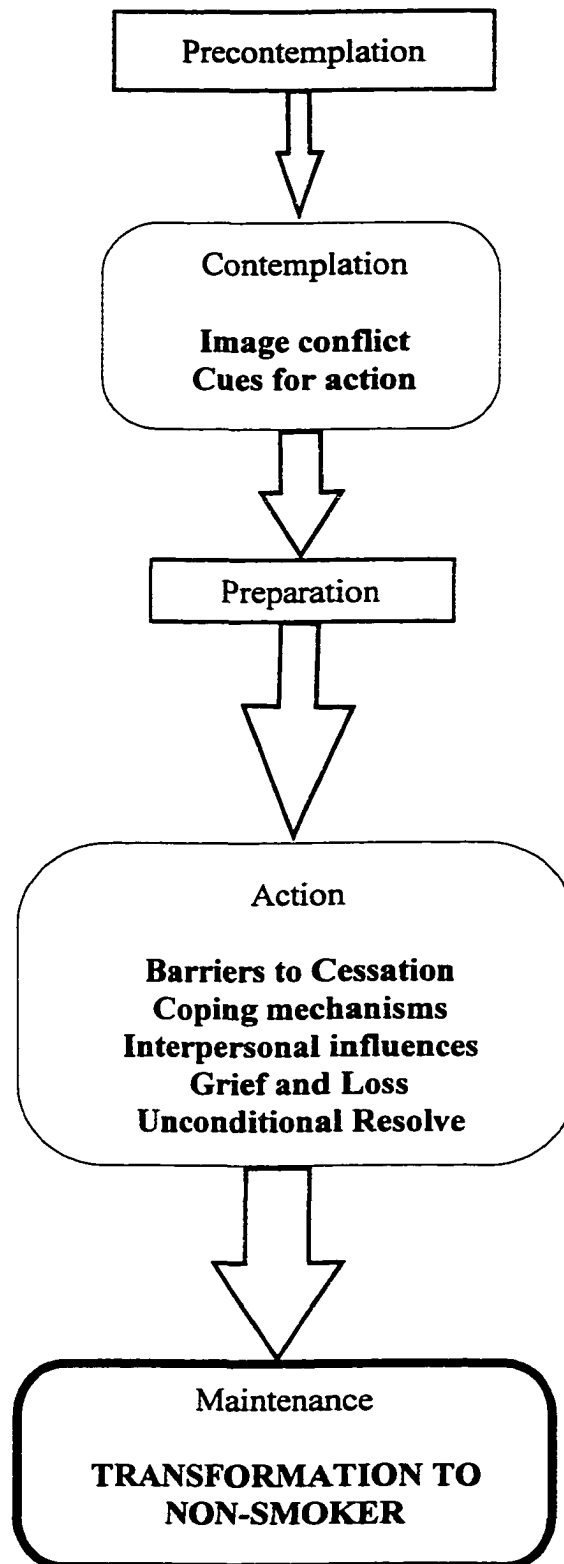


Figure 2. Major Themes By Stage of Cessation

## **APPENDIX B**

### **Tables**

Table 1

Preliminary Codes

---

Stages of Change

Precontemplation

Contemplation

Preparation

Action

Maintenance

Pender's Revised Health Promotion Model

Prior Related Behavior Personal Factors

Perceived Benefits of Action

Perceived Barriers to Action

Perceived Self-efficacy

Activity-related Affect

Interpersonal Influences

Situational Influences

Commitment to a Plan of Action

Table 2

Biographical Sketch of Subjects

Pseudonym	Characteristics
Erica	Erica is a 43-year old registered nurse who started smoking at age 19, smoked 10- 15 cigarettes per day for 22 years and has quit for three years. She used nicotine patches to quit.
Ronnie	Ronnie is a 52-year old registered nurse who started smoking at age 15, smoked 50 cigarettes per day for 35 years and quit one year ago. She used affirmation tapes as a cessation aid.
Susan	Susan is a 59-year old counselor who started smoking at age 15, smoked 40 cigarettes per day 42 years and quit two years ago. She went through a formal cessation program to quit.
Alice	Alice is a 61-year old homemaker who started smoking at the age 11, smoked 40 cigarettes per day for 50 years and quit two years ago. She attended a formal cessation program.
Karla	Karla is a 50-year old dental hygienist who started smoking at 16, smoked 30 cigarettes per day for 35 years and quit smoking six months ago. She used welibutrin as a cessation aid.
Janet	Janet is. a 52-year old administrator-who started smoking at age 15, smoked 50 cigarettes per day for 35 years and quit 30 months ago. She used no aids.

Table 2 (continued)

Pseudonym	Characteristics
Barbara	Barbara is a 62-year old retired teacher who started smoking at age 25, smoked 30 cigarettes per day for 38 years and quit 9 months ago. She attended a program and used welbutrin.
Linda	Linda is a 51-year old administrative secretary. She started smoking at age 13 and smoked 25 cigarettes per day for 36 year She quit eight months ago utilizing nicotine patches.
Christine	Christine is a 60 - year-old realtor who started smoking at age 20 and smoked 20-30 cigarettes per day for 40 years. She quit one year ago. She used no aids.
Theresa	Theresa is a 41 year-old secretary who started smoking at age 12, smoked 60 cigarettes per day for 27 years and quit two years ago. She used no cessation aids.
Cynthia	Cynthia is a 42-year old software professional who started smoking at age 17, smoked 10-20 cigarettes per day for 20 years and quit three years ago. She used no aids.
Heather	Heather is a 31-year old medical assistant who started smoking at age 18, smoked eight to ten cigarettes per day for 10 years and quit two years ago. She used no aids.



## **APPENDIX C**

### **Data Collection Tools**

- . \*

**Demographic Data**

Name \_\_\_\_\_

Address \_\_\_\_\_

Street

City

State

Zip

Phone \_\_\_\_\_

Occupation \_\_\_\_\_

**Smoking History:**

At what age did you begin to smoke? \_\_\_\_\_

How many cigarettes did you smoke per day on average? \_\_\_\_\_

How many years did you smoke? \_\_\_\_\_

How many times did you try to quit before you were successful? \_\_\_\_\_

When was the last time you smoked a cigarette, even a puff? \_\_\_\_\_

Are you currently using any nicotine products? \_\_\_\_\_

Did you use any nicotine or other aids to quit? \_\_\_\_\_

If so, how long? \_\_\_\_\_

Would you like to receive a copy of the study results? \_\_\_\_\_

**APPENDIX D**  
**Human Consent Forms**

## THE EXPERIENCE OF SUCCESSFUL SMOKING CESSATION: A PHENOMENOLOGICAL INQUIRY

I am a graduate student in the Department of Nursing at the University of Nevada Las Vegas. As part of my MS degree requirements, I am researching the experience of successful smoking cessation. I hope the results of this study will be helpful to others who want to quit smoking, as well as health care professionals trying to help their patients to quit. You have identified yourself as a former smoker who has successfully quit smoking for at least six months, but not more than three years. I am requesting your participation in my study.

Your participation will consist of a personal interview conducted by me, asking you questions about what it was like for you to quit smoking. I will audio-tape our interview and analyze the written transcripts of all participants to identify common themes. The interview will take an estimated one hour of your time, and will be scheduled at a time and place convenient to you. You may be contacted after the initial interview to elicit your feedback regarding the accuracy of my data interpretation. A second interview would take approximately one additional hour.

There is no identified risk to you as a result of your participation. Confidentiality will be maintained throughout the study. At no time will your name be used in association with study results. All your responses will be kept strictly confidential and fictitious names will be used when reporting data. Transcripts will be kept in a locked file cabinet in my home, and tapes will be erased or destroyed upon study completion. If you have any questions, you may call my research chairperson, Dr. Susan Kowalski at 895-3360. The Office of Sponsored Programs, 895-1357 can give you further information regarding the rights of research subjects.

Your participation in this study is purely voluntary. You may withdraw from the study at any time and suffer no negative effects. You will be free to turn off the tape recorder during the interview if you so desire, to refuse to answer any or all questions, and/or to discontinue the interview at your discretion, with no reprisal.

Sincerely,

Gail Rattigan, R.N., BSN

### CONSENT TO PARTICIPATE IN RESEARCH STUDY

I understand the nature and requirements of the above-described study, and agree to participate in the study. I understand that I have the right to not answer any question(s), to turn off the tape recorder, or to terminate the interview at any time. Additionally, I understand that I may withdraw from the study at any time.

\_\_\_\_\_  
Participant signature

\_\_\_\_\_  
Date

## INTERVIEW QUESTIONS

Many people find quitting smoking to be very difficult and have been unable to do so. You have been successful. I would like to explore with what the experience of quitting smoking has been like for you.

1. Tell me-about. your decision to quit smoking. How and why did you come to this decision?
2. Describe your preparation for quitting. How did you get ready?
3. Tell me about the actual process of quitting and the first few months after you quit. How did you go about quitting?  
What was it like for you during that time?  
Can you recall specific changes you made in your behavior or thoughts during that Time?
4. What were the positive aspects of quitting smoking for you?  
What were the negative aspects?  
What helped you to be successful?  
Did anything hinder you or make it difficult to quit?  
What situations in the months since you have challenged your efforts to remain a non-smoker? How have you handled these?
5. How has quitting smoking affected you and your life?  
Have there been any changes in the way you feel about yourself?  
How has quitting smoking changed your relationship with others?
6. If you tried unsuccessfully to quit in the past, what was different this time, that made you successful?



25 January 2000

**GAIL RATTIGAN  
DEPARTMENT OF NURSING  
4505 S. MARYLAND PARKWAY  
LAS VEGAS NV 89154**

**Dear Ms Rattigan:**

The Department of Nursing Human Subjects Rights Committee met on your proposal 'The experience of successful smoking cessation: a phenomenological inquiry' and approved your study with a few minor changes. Please see Dr. Kowalski for the specifics. When you have made the changes please send me a copy for the Committee's file. You may then take your proposal to the University Human Subjects' Right committee for their review.

You have an interesting project that has potential to provide information that will be helpful to practitioners as well as their clients. If you make any changes in your project please let the Committee know before you implement any change.

If you have any questions about the above please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "Margaret Louis". The signature is fluid and cursive, with a large initial "M" and a long, sweeping underline.

**Margaret Louis  
Chairperson, Human Subjects Rights Committee  
Department of Nursing, UNLV**

Department of Nursing  
4505 Maryland Parkway • Box 453018 • Las Vegas, Nevada 89154-3018  
(702) 895-3360 • FAX (702) 895-4807



DATE: January 31, 2000

TO: Gail Rattigan  
Nursing  
M/S 3018

FROM: *for* Dr. William E. Schulze, Director *K. Green*  
Office of Sponsored Programs (x1357)

RE: Status of Human Subject Protocol Entitled:  
"The Experience of Successful Smoking Cessation: A Phenomenological Inquiry"  
OSP # 501s0100-212

This memorandum is official notification that the protocol for the project referenced above has been approved by the Office of Sponsored Programs. This approval is for a period of one year from the date of this notification, and work on the project may proceed.

Should the use of human subjects described in this protocol continue beyond a year from the date of this notification, it will be necessary to request an extension.

If you have any questions or require assistance, please contact the Office of Sponsored Programs at 895-1357.

cc: OSP File

Office of Sponsored Programs  
4505 Maryland Parkway • Box 451037 • Las Vegas, Nevada 89154-1037  
(702) 895-1357 • FAX (702) 895-4242

## **APPENDIX E**

### **Permission to Use Pender' Model**





January 8, 2002

Gail Rattigan  
1939 Altivo Drive  
Henderson, Nevada 89014

Dear Gail:

You have permission to use my **Revised** Health Promotion Model in your thesis entitled "the Experience of Successful Smoking Cessation: A Phenomenological Inquiry." Good luck with your research.

Cordially,

A handwritten signature in cursive script that reads "Nola J. Pender".

Nola J. Pender, PhD, RN, FAAN  
Associate Dean for Research



GRANTS AND RESEARCH OFFICE

400 North Ingalls Bldg. • Ann Arbor, Michigan 48109-0482  
(734) 764-9555 FAX: (734) 615-1666

## VITA

Graduate College  
University of Nevada, Las Vegas

Gail Ann Rattigan

**Home Address:**

1939 Altivo Drive  
Henderson, Nevada 89014

**Degrees:**

Bachelor of Science, Nursing 1975  
University of Wisconsin-Wilwaukee

**Special Honors and Awards:**

March of Dimes Critical Care Nurse of the Year, 1993

Chamber of Commerce Ambassador of Courtesy, 1999

Recipient of the Sigma Theta Tau Zeta Kappa Chapter Research Grant, 1999