FACTORS RELATED TO SMOKERS’ SUCCESSFUL COMPLETION OF A SMOKING CESSATION PROGRAM

By

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A THESIS

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DEDICATION

I humbly dedicate this work to the loving memory of

my beloved late husband

Joseph M. Chandy PhD, MSW, MA, BA (Sociology), BA (Philosophy)

who through his deep respect for education

inspired me to get educated.

I miss you, my friend and my guide.
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Abstract

Cigarette smoking is a linking factor to lung cancer. The prevalence of smoking is a public health concern. Smoking cessation programs resulted from awareness of the effects of smoking.

This study's conceptual model focused on the programmatic elements of a smoking cessation program that are related to successful completion of a smoking cessation program. This study used a combination of qualitative and quantitative methods. Study participants included 18 smokers enrolled in the smoking cessation program at a Kaiser Permanente Facility in a metropolitan area of the Central valley of California during the winter of 2005.

Gender, race, education and age were examined for association with successful completion of the program. This study was completed with statistical analysis using nonparametric tests to examine the relationship of these demographic variables with completion of the smoking cessation program. In addition a qualitative descriptive analysis was used to evaluate the programmatic elements of the smoking cessation program. All four variables were found to be independent of a relationship with completion or non-completion of the program. Components of the smoking cessation program were favored by some, or not chosen as helpful by others. Study results cannot be generalized due to the small size of the final sample.
Chapter 1

Introduction

Statement of the Problem

This study examined the factors related to smokers who completed a smoking cessation program. Cigarette smoking is a major health risk factor and has been demonstrated to be a linking factor to lung cancer (Gantt, 2001; Haukkala, Laaksonen, & Uutela, 2001; Houfek & Atwood, 2003). The prevalence of smoking among young men and women is a growing concern worldwide, and knowledge about the effect of smoking, some assert, is essential to any smoking cessation effort (Payne, 2001). “Adolescence is the primary time during which tobacco use occurs and also when the transition from experimentation to some level of dependence takes place” (Denham, Meyer, & Toborg, 2004. p. 171). Education, gender, socioeconomic status and living with smokers in the same household are reasons found to have an affect on one’s decision to smoke (Barbeau, Krieger, & Soobader, 2004; West, McEwen, Bolling, & Owen, 2001). Gender, ethnicity and social class have been associated with smoking related lung cancer (Payne, 2001). Smoking cessation programs are the result of an increasing awareness of the negative consequences of smoking in this era and are viewed as an approach to reducing a major health risk factor. The purpose of this study was to describe the components of a formalized program on smoking cessation that influenced smokers to complete a smoking cessation program.

Significance

Smoke is defined as the vaporous system made up of small particles of carbonaceous matter in the air, resulting mainly from the burning of organic material, such as wood or coal, a suspension of fine solid or liquid particles in a gaseous medium, a cloud of fine particles,
something insubstantial, unreal, or transitory, the act of smoking a form of tobacco
affects the nervous system and results in addiction (Anderson, 1994).

Reasons to start smoking vary and include efforts to suppress one’s appetite, control
weight, support a poor self image, support inequalities in daily lives, declare autonomy from
parents and foster affiliation with peers, to fit in, to belong to a group, to reduce insecurity
among girls, to mimic adolescents who had parents or siblings who smoke, or to relax and
lower stress (Seguire & Chalmers, 2000). The consequences of smoking are lung cancer and
chronic lung conditions for the smokers (Payne, 2001) and for one’s immediate family
members (Denham et al., 2004). “Cigarette smoking is the largest preventable cause of death
in the United States” (Lichtenstein & Brown, 1982). Smoke Free Educational Services (as
cited in Freedom From Nicotine Program [FFNP], n.d.) reports that, “Tobacco kills more
Americans each year than alcohol, cocaine, crack, heroin, homicide, suicide, car accidents,
fires and AIDS combined” (p. 1).

Currently, unwanted effects and consequences of smoking are considered common
information (Ho, 1998). Smoking is the leading cause of lung cancer among men and women
(Haukkala et al., 2001; Houfek & Atwood, 2003; U.S. Department of Health and Human
Services [USDHHS], 2001). Cigarette smoking was prevalent among men long before
women, but the gap has narrowed since the 1980s. Women are more vulnerable to lung cancer
than men at a given rate of exposure to cigarette smoke (Payne, 2001). Payne (2001) also
reports that the standardized lung cancer mortality ratio is higher among the lowest class
groups. Research suggests that teens who began smoking at a younger age tend to have
higher nicotine addiction (Denham et al., 2004; USDHHS, 2001) than those who began
smoking at a later stage of life. Also, study findings have substantiated that teenage girls are more prone to early smoking than teenage boys (Denham et al., 2004; USDHHS, 2001).

Cigarette smoking and its related risks present major health and social challenges to the American economy. "Tobacco is an extraordinary economic fuel, and its powerful economic impact comes into direct conflict with its vast social costs" (USDHHS, 2001, p. 7). Smoking plays an important role in chronic lung conditions (USDHHS, 2001) and thus in increased health care costs. It is important to understand the factors related to smokers who complete smoke cessation programs to ensure that the efforts to help smokers to quit smoking and live smoking free are successful.

About 3,000 to 4,000 substances have been identified in cigarette smoke (FFNP, n.d.). Ninety two percent (92%) of those identified substances are deadly gases (FFNP, n.d.). Of these, carbon monoxide, hydrogen cyanide and nitrogen oxide are the three most poisonous gases. Particulate matter or tiny particles of smoke penetrate to the farthest corners of the lungs during smoking. About 70% of the particles that are inhaled are retained in the lungs of a smoker. Tar and nicotine make up a large amount of the cigarette smoke. Tar is one of the cancer-causing particles of the smoke. Nicotine is poisonous (FFNP, n.d.).

Numerous studies are available on the issue of cigarette smoking and related health consequences (Haukkala et al., 2001; Houfek & Atwood, 2003; Payne, 2001; Sturm, Yeatts, & Loomis, 2004). Researchers have conducted multiple studies regarding the impact of Smoking Cessation Programs on smokers' attempts to quit smoking (Bock, Becker, Niaura, & Partridge, 2000; Dijkstra, Vries, Kok, & Roijackers, 1999; Ho, 1998; McFeelly, 2001; Ostroff et al., 1999; Parry, Fowkes, & Thomson, 2001). Researchers have also conducted studies on the number of dropouts of such smoking cessation programs (Gantt, 2001;
Gorecka et al., 2003; Hennrikus et al., 2002; Manfredi, Crittenden, Cho, Engler, & Warnecke, 2001) and on the factors related to successful smoking cessation (Cornuz et al., 2002; Danis & Seaton, 1997; McIlvain, Bobo, Leed-Kelly, & Sitorius, 1998; Okah et al., 2003; West, 2001).

**Conceptual Framework**

The conceptual model that informs this study focused on the programmatic elements from the formal Kaiser Permanente program related to smoking cessation, and demographic variables. The decision to participate in a formal smoking cessation program varies from person to person, but adhering to the requirements and completing a program depends on other factors, that were examined in this research.

The FFNP program, a formal program offered by Kaiser Permanente (KP), a Health Maintenance Organization in Bakersfield, California, consists of a series of five classes conducted over a period of five weeks. Enrollment in this FFNP is by self-referral or referral from by one’s personal physician. Participants can enroll as many times as desired. A brief description of the intervention program is presented here.

"Preparing to Quit". In the first class of the FFNP, the facilitator, the participants, and the provider begin with a welcome and an overview. During this session, the participants identify the harmful effects of smoking and the benefits of quitting. Also during this time, participants determine their own level of motivation, commitment and readiness to quit smoking. They are instructed to complete a 24-hour-smoking-record to identify their smoking behaviors and cravings. A physician screens them individually for use of Wellbutrin (bupropion) and a nicotine patch, a further aid to the cessation of smoking. The expectation at the end of the first session is that each participant will have reduced smoking to one pack
or less per day and will start Wellbutrin SR (bupropion) to help with cravings. Participants will begin to use a nicotine patch one week after beginning the Wellbutrin (bupropion) regimen.

"Quitting". During the second FFNP class, the participants start with their progress report, and the facilitator reviews their "homework." In this session participants identify the triggers for their smoking, select two coping techniques for each trigger, and identify a dilemma they might encounter and how they will deal with it for successful smoking cessation. FFNP participants will then develop a "game plan" to quit smoking and set a quit date. They will choose a buddy on whom they can call at times when they need support.

Before closing the second session of FFNP, the participants will be able to describe proper usage of the nicotine patch. The patch is a 21-milligram patch used for four weeks followed by a 14-milligram patch applied for two weeks, and finally a 07-milligram patch used for two weeks.

"Staying Quit". At the time of the third FFNP class, participants report their progress, congratulate and reward each other for a smoke free week, learn stress management and positive affirmations. Homework for the coming week requires participants to practice at least one stress management technique and rehearse a positive affirmation.

"Staying Quit" Encore!. Class #4 of the FFNP requires participants to report on progress during their smoke-free week. Then they learn about high-risk situations, relapse prevention, principles of staying quit, weight management and basic principles of a healthy diet. There is also a review of the benefits of being smoke free.

"Follow-Up". The final class begins with a progress report followed by completion of a relapse prevention worksheet. Participants are guided into an exercise session to choose
an exercise they enjoy and will continue. More stress reducers, the serenity prayer for smokers, and the agency’s resource information conclude the session. This final session helps the participants to develop a plan to maintain non-smoking status, set two goals to improve their personal fitness level, and the procedure used to identify additional smoking cessation resources if needed.

Research Questions

The research question and the hypotheses in this study are:

RQ1: What factors of a formalized smoking cessation program do participating smokers perceive influenced them to complete the program?

H1: Gender of smokers will be associated with their completion of a formalized smoking cessation program.

H2: Race of smokers will be associated with their completion of a formalized smoking cessation program.

H3: Education level of smokers will be associated with their completion of a formalized smoking cessation program.

H4: Age of smokers will be associated with their completion of a formalized smoking cessation program.

Operational Definitions

For the purposes of this study, the following operational definitions were used:

1. Smokers - are men and women who smoke cigarettes and were enrolled in the FFNP, a formalized Smoking Cessation Program, offered by KP (FFNP, n.d.).

2. Self-reported factors - are the participant’s perceptions of the programmatic components that influence the decision to stop depending on cigarette smoking, and
were measured by a summative score on a researcher-created survey instrument assessing motivation to quit smoking.

3. Smoke Cessation Program - is a formalized series of five classes consisting of Preparing to Quit, Quitting, Staying Quit, Staying Quit Encore, and Follow-Up offered by KP.

4. Educational level - is defined as years of school and college completed. One question in the demographic section of the researcher-developed data collection instrument was used to measure this variable.

5. Influence – is defined as the factors of the FFNP which affect the smokers in achieving successful completion of the smoking cessation program.

6. Completion, no longer smoking, stops smoking, or successful completion is defined as fulfilling the requirements of the Smoking Cessation Program and was measured by documented attendance through five FFNP classes. Only individuals who have stopped smoking were classified as having completed the program.

7. Factors of Smoking Cessation Program – are defined as, preparing to quit (class #1 of the FFNP), quitting (class #2 of the FFNP), staying quit (class #3 of the FFNP), staying quit encore! (class #4 of the FFNP), and follow-up (class #5, the final class of FFNP).

Assumptions

The researcher assumed the following aspects as the factors related the successful completion of FFNP for the participants of this study

1. Psychological supports of members as a group positively influence the members to complete FFNP.
2. Combined use of nicotine patches and Wellbutrin (bupropion) assist the smokers in achieving a successful completion of the FFNP.

Limitations

There were several limitations acknowledged related to setting, research design and sample. This study was limited to one location within the KP system and thus the study results would not be generalized to all KP locations. The research design used a posttest measure only and thus no pretest measures were available for comparison with the posttest. This study sampled FFNP participants attending the series of classes during the winter of 2005, and did not represent all the FFNP attendees taking the course throughout the year. Thus the limitation due to sampling is acknowledged.

Summary

Cigarette smoking is a major health risk factor and has been demonstrated to be a linking factor to lung cancer. Awareness of the health consequences of smoking resulted in formalized smoking cessation programs. The conceptual model that informs this study focused on the programmatic elements from the formal Kaiser Permanente program related to smoking cessation (FFNP), and demographic variables. The FFNP program, a formal program offered by Kaiser Permanente (KP), a Health Maintenance Organization in Bakersfield, California, consists of a series of five classes conducted over a period of five weeks; Preparing to Quit, Quitting, Staying Quit, Staying Quit Encore, and Follow-Up.

The researcher did a comprehensive literature search on factors related to smoking and successful smoking cessation. The following chapter presents the literature review, and describes the findings of multiple research studies located through the literature search.
Chapter 2
Review of the Literature

Introduction

Cigarette smoking is a major health risk factor, and has been demonstrated to be a linking factor to lung cancer (Danis & Seaton, 1997; Gantt, 2001; Haukkala et al., 2001; Houfek & Atwood, 2003; McIlvain et al., 1998; USDHHS, 2001). Smoking has been studied at different times and stages of knowledge of its effect on health (Lichtenstein & Brown, 1982). The National Center for Chronic Disease Prevention and Health Promotion’s research findings (Center for Disease Control [CDC], 2001) indicates potential health affects and disadvantages for children due to maternal smoking during pregnancy and negative reproductive outcomes. Children who reported smoking or who were exposed to smoke in other ways, even at low levels of exposures, are found to be at high risk for asthma prevalence and growth retardation (Hypponen, Smith, & Power, 2003; Sturma et al., 2004; USDHHS, 2001).

The origin and development of a history of smoking cessation programs were not found in this review of the literature. However, nicotine was formerly not considered addictive and smoking was more socially acceptable than other forms of substance use (McIlvain et al., 1998). “Tobacco use in tobacco producing regions is apt to be viewed as socially acceptable and is usually understood by residents as a contributing factor to economic well-being” (Denham et al., 2004, p.170). One of the earliest notations on smoking cessation found in this review was a combined smoking cessation and alcohol treatment program offered in1983 (McIlvain et al., 1998).
The researcher conducted a comprehensive literature review on the topic of factors related to smokers’ successful completion of smoking cessation programs. This review examined the database Pub Med, the National Library of Medicine. The review suggests that successful completion of smoking cessation is effected by age of the smoker, educational level of the smoker, severity of dependency to tobacco, smoke related illnesses, and availability of social support (Chatkin, Abreu, Haggstram, Wagner, & Fritsher, 2004; Denham et al., 2004; Ho, 1998; Meland, Maeland, & Laerum, 1999; Ostroff et al., 1999; West et al., 2001). This paper will be focusing on the components of an intervention for smokers to assist them with smoking cessation.

**Genetic Factors**

Houfek and Atwood (2003) studied genetic susceptibility to lung cancer and predicted such knowledge would be utilized in future lung cancer prevention and treatments. Payne (2001) studied gender relationship and lung cancer, and reported increasing lung cancer deaths among women and decreasing or stable deaths among men as a result of genetic factors, risk profile, and mortality and morbidity differences between men and women. According to Payne (2001), women are at a greater risk for lung cancer compared to men due to the hormonal differences and gendered factors such as smoking behaviors.

Lerman et al. (2004) studied a group of 299 smokers who were seeking treatment to quit smoking in Washington, DC, and Pennsylvania. The findings are showing some genetic basis for the nicotine addiction. Thus, Smoking Cessation Programs ought to be tailored differently for individuals seeking smoking cessation. Lerman et al. (2004) also found that both smokers who were highly dependent on nicotine and smokers who were obese needed higher dose of nicotine replacement therapy. African American smokers possess high serum
cotinine levels compared to white smokers and they benefit from having higher dose nicotine replacement therapy (Lerman et al., 2004). A further finding of Lerman et al. (2004) was that a higher dose of nicotine replacement was achieved by using nicotine nasal spray and the lower dose nicotine treatment was obtained by using the trans-dermal nicotine patch.

**Cultural and Social Factors**

Barbeau et al. (2004) state that education “is an important determinant of health in its own right” (p. 269). Chatkin et al. (2004) did not find significant differences in the successful completion of a Smoking Cessation Program between smokers with different levels of education. Chatkin et al. (2004) found achieving better outcomes from attendance at a smoking cessation program by having a combined program of counseling, nicotine replacement therapy and bupropion (a pharmacological treatment with trade names of Wellbutrin and Zyban).

Ho (1998) studied diseases caused by smoking versus the impact of social dimensions (such as advertisement media, parents, siblings, peers and other significant persons) on smoking cessation. Ho found that social dimensions had a significant impact on the younger smokers (three times the impact in comparison with adult smokers), but not on the older smokers. Adult smokers, Ho indicated, tend to be more habitual smokers, and thus social dimensions may be relatively unimportant in the decision to continue or quit smoking.

West et al. (2001) reported that successful smoking cessation is affected negatively by those in deprived socio-economic groups, among individuals with lower educational levels, among smokers who live with smokers, among smokers who live alone, among smokers starting to smoke at younger ages, and more among women than men. West et al. (2001) also found smokers who have social support, smokers as older adults, smokers who
have children at home, smokers who possess confidence in quitting smoking, smokers who have failed in prior attempts to quit smoking, and smokers with lesser dependency on tobacco have a better chance of successful smoking cessation.

Okah et al. (2003) found that home smoking restriction (the practice of limiting or banning cigarette smoking in the home) better attains smoking cessation among the disadvantaged population. This approach was found to be less anxiety provoking when compared to comprehensive smoking cessation programs.

Hennrikus et al. (2002) studied Smoking Cessation Programs for effectiveness at worksites, and financial incentives for participation. Incentives were related to increased numbers of participants registering in the program, but an effective cessation rate did not occur as a result of incentives. The study results revealed that different program types, such as phone counseling programs, are as effective as intensive group programs.

Bandyopadhyay, O'Mahony and Pathy (2002) studied a group of “age concern volunteers” (65 years and over) in Wales. The results of the study revealed that older adults are more motivated than the general public to quit smoking and to remain smoke free.

**Motivational Factors**

Motivation to stop smoking and one’s degree of dependence on cigarettes together plays a role in the success rate of a smoking cessation program (West et al., 2001). These authors also reported that those who had a prior experience of attempting to quit smoking were more successful in subsequent attempts compared to the smokers who were attempting to quit for the first time.

Haukkala et al. (2001) studied differences between smokers who wanted to quit smoking and smokers who did not want to quit. Willingness to quit smoking was found equal
among men and women. Women who did not want to quit smoking were older than the
women who indicated they wanted to quit smoking. Men and women who wanted to quit
smoking possessed a higher income compared to those who did not want to quit smoking.
Haukkala et al. (2001) did not find significant educational disparities among either gender in
successful smoking cessation. Also noted in the study was a parallel relationship between
smoking and high fat consumption.

Dijkstra et al. (1999) studied positive and negative outcome expectations with a group
of smokers in the Netherlands who intend to quit smoking. The authors found that those who
have a stronger self-evaluative outcome have a high intention to quit. This results in a greater
chance of succeeding in their attempt to quit. Also the study results revealed that one third of
the study participants did not find motivation for smoking cessation as a result of getting
information on long-term health consequences of smoking.

Health and Related Factors

Manfredi et al. (2001) studied 404 patients who attended smoking cessation programs
in seven public health clinics in Chicago. The findings of the study revealed that the
participants who had greater exposure to posters, booklets and provider-advice had a better
outcome related to remaining smoke free.

Meland et al. (1999) studied a group of individuals with cardiovascular risk factors
who underwent lifestyle change counseling. The study results revealed that older individuals
with high confidence are more likely to remain free of smoking. Smoking cessation was also
found related to a higher educational level, though the results were not statistically significant
(Meland et al., 1999).
West (2001) hypothesized smokers' interpreting their feeling of hunger as craving for nicotine and studied a group of smokers who replaced glucose chewable tablets in place of cigarettes. He reported a promising but not conclusive effect of glucose to assist individuals with successful smoking cessation. 

Glover (1993) studied the effect of a comprehensive smoking cessation program which addresses components of smoking dependency (behavioral, psychological, and physiological), and combination therapy in a 6 group 7 week session. The findings revealed that effective smoking cessation programs should include “setting a quit date, eliminating smoking cues, identifying and preparing to cope with temptations after cessation, attending to relapse and encouraging continued nonsmoking, and providing follow-up contact and social support for quitting and abstinence” (Glover, 1993, p. 57).

Summary

The origin and development of a history of smoking cessation programs were not found in this review of the literature. However, the researcher found that the nicotine was formerly not considered addictive, and use of nicotine was favored by the society for its positive impact on the economy.

Various studies by various authors concluded that the female gender is more vulnerable to the negative effects of smoking, more than the male gender, and a mother’s smoking impacts their unborn or new born children. Factors related to successful smoking cessation was impacted by genetic factors, cultural and social factors, motivational factors, health related factors, and knowledge. The following chapter describes the methods of the study, to assess motivational factors of a group of smokers enrolled in a smoking cessation program.
Chapter 3

Methods

Setting

The setting of this study was Kaiser Permanente (KP) Ming Medical Facility in Bakersfield, California during the winter of 2005. This facility is a large, health maintenance organization that provides services to the local population. KP offers a Smoking Cessation Program (FFNP) as a free service for KP members and a paid service to nonmembers. The study was conducted in a classroom at KP during its offering of FFNP for a group of smokers.

Research Design

This study design used a combination of a qualitative descriptive study and a quantitative analytical study. The researcher collected demographic data at the end of class #1, and self-administered questionnaires (SAQs) at the end of class #5 of FFNP from the group of participants. The researcher met with the participants of the classes during their first and final sessions of the Smoking Cessation Program and spent an hour with each group, attending the sessions with them. The researcher distributed the survey at the end of the smoking cessation class and the study participants took approximately 15 minutes to complete the survey. The research design used a posttest measure only, as no pretest measures were available to compare with the posttest.

Sample

The population from which the sample was drawn included members of classes on smoking cessation. The sample numbered 19 smokers who were members of an FFNP group and who attended the formal Smoking Cessation Program during the winter of 2005. The
total population of the FFNP class participants (19 smokers in all) was invited to participate in the study. One of the participants declined to be part of the study. The inclusion criteria for this sample was those who could read and write English, had adequate hearing, and were enrolled in the FFNP, KP during the winter of 2005. Exclusion criteria included those enrollees who could not read and write English.

*Data Collection Instrument*

The data collection instrument was a self-developed questionnaire that requested demographic information and asked four questions (Appendix A). The questions were designed to assess the influence of the classes and the participants' completion of the Program. Three experts in the field of smoking cessation helped with external validation of the instrument. The data collection instrument was assessed through a pilot test for validity, reliability, utility, and cost before administering it to the participants of the FFNP.

*Procedure*

*Access.* To access the participants of the FFNP, the researcher telephoned the Director of Education at KP; explained the purpose of the study, its significance, and the way in which the researcher planned to conduct the study. The researcher, as the Director instructed, submitted a request in writing in the fall of 2004 and obtained permission to access the participants (Appendix B).

*Pilot study.* A researcher-developed questionnaire was administered to three participants of the FFNP prior to the selection of the study-participants in order to assess "the data collection instruments and the procedure and methods surrounding the collection of data" (Farrell, 2003, p. 46).

*Human subjects protection.* The study was reviewed and approved by the California
State University, Bakersfield Institutional Review Board (IRB) and the full documentation is included in Appendix C. All participants signed an informed consent form prior to participating in the study (Appendix D). Each participant was given a copy of the signed form for their records.

After collection the data were transported from the data collection site to the researcher's home by use of the researcher's car. Only the researcher and the members of the thesis committee had access to the information. Until completion of the project, the data were locked in a briefcase at the researcher's home. Data were coded and entered into a data processing program. Five years after the study has been completed the data will be destroyed. Strict confidentiality was practiced while analyzing the data.

Preparing the data for analysis. First, the questionnaires were reviewed to determine if they were usable. The questionnaires were reviewed for blank spaces, and for misinterpretation or noncompliance with directions. Secondly, the data were coded which included assigning numeric codes to "categorical variables and narrative responses" (Neuendorf, 2002, p. 6). The code book can be found in Appendix E.

Data management. The researcher, as directed, prepared the data for analysis through comprehending, synthesizing, theorizing, and recontextualizing (Polit & Beck, 2004). After "checking for the accuracy of the data" (Polit & Beck, 2004, p. 594) the researcher, with guidance, developed a coding scheme for the purpose of descriptive analysis.

Data analysis. The researcher organized, classified and indexed the data (Polit & Beck, 2004) for analysis with Statistical Package for the Social Sciences (SPSS). To analyze research questions the researcher conducted a qualitative descriptive content analysis by a "systematic, and objective" process (Neuendorf, 2002, p. 1). The statistical tests used to
examine the data as they related to the four hypotheses were non-parametric tests for independent samples.

**Summary**

The setting of this study was Kaiser Permanente (KP) Ming Medical Facility in Bakersfield, California during the winter of 2005. This study design used a combination of a qualitative descriptive study and a quantitative analytical study. The researcher met with the participants of the classes during their first and final sessions of the Smoking Cessation Program. The data collection instrument was a researcher-developed questionnaire that requested demographic data and asked four questions. The questions were designed to assess the influence of the classes and the participants' completion of the Program.

To analyze research questions the researcher conducted a qualitative descriptive content analysis by a "systematic, and objective" process (Neundorf, 2002, p. 1). The statistical tests used to examine the data as they related to the four hypotheses were non-parametric tests for independent samples. The next chapter describes the findings, analysis, and interpretation followed by a discussion of the study results.
Chapter 4

Findings, Analysis, Interpretation, and Discussion

Introduction

This Chapter presents the findings of the study with analysis, interpretation and discussion. Included will be a discussion of the intended and final sample, and presentation of both qualitative and quantitative analysis.

Intended and Final Sample

The intended study participants were 24 smokers who were members of two of the FFNP groups at Kaiser Permanente, Bakersfield, California and who attended the program during the winter of 2005. The final sample included 18 of the 19 enrolled members, of which 10 participants completed the program (Table 1). One of the 19 enrolled members declined to participate in the study. Members of the smoking cessation program who quit their smoking habits were permitted to complete the program, compared to the members who did not quit smoking and who were not permitted to complete the program.
Table 1

*Participants by Gender, Race, Education, Age and Completion Status*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Gender</th>
<th>Race</th>
<th>Education</th>
<th>Age</th>
<th>Completed Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>White</td>
<td>College graduate</td>
<td>40</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>Black*</td>
<td>College graduate</td>
<td>43</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>White</td>
<td>Some college</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>Female</td>
<td>White</td>
<td>Some college</td>
<td>68</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>White</td>
<td>Some college</td>
<td>39</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>Male</td>
<td>White</td>
<td>Some college</td>
<td>29</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>Male</td>
<td>White</td>
<td>Some College</td>
<td>32</td>
<td>Yes</td>
</tr>
<tr>
<td>8</td>
<td>Male</td>
<td>White</td>
<td>College graduate</td>
<td>32</td>
<td>No</td>
</tr>
<tr>
<td>9</td>
<td>Female</td>
<td>White</td>
<td>Some college</td>
<td>36</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>Female</td>
<td>White</td>
<td>Some college</td>
<td>48</td>
<td>Yes</td>
</tr>
<tr>
<td>11</td>
<td>Male</td>
<td>White</td>
<td>Some high school</td>
<td>27</td>
<td>No</td>
</tr>
<tr>
<td>12</td>
<td>Male</td>
<td>White**</td>
<td>High school</td>
<td>47</td>
<td>Yes</td>
</tr>
<tr>
<td>13</td>
<td>Male</td>
<td>White</td>
<td>Some college</td>
<td>46</td>
<td>No</td>
</tr>
<tr>
<td>14</td>
<td>Female</td>
<td>AIA***</td>
<td>College graduate</td>
<td>33</td>
<td>No</td>
</tr>
<tr>
<td>15</td>
<td>Male</td>
<td>White</td>
<td>Graduate Degree</td>
<td>50</td>
<td>Yes</td>
</tr>
<tr>
<td>16</td>
<td>Male</td>
<td>White</td>
<td>College graduate</td>
<td>52</td>
<td>Yes</td>
</tr>
<tr>
<td>17</td>
<td>Female</td>
<td>White</td>
<td>College graduate</td>
<td>47</td>
<td>Yes</td>
</tr>
<tr>
<td>18</td>
<td>Female</td>
<td>Black</td>
<td>College graduate</td>
<td>53</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Note.* * Black not of Hispanic origin; ** White not of Hispanic origin; *** AIA-American Indian or Alaskan.
Quantitative Analysis

Due to an insufficient number of observations, a series of non-parametric statistical tests were performed on these data. Table 2 shows the four demographic variables of sex, race, education, and age, compared with the completion status regarding the smoking cessation program.

Qualitative Analysis

Gender and completion/non-completion. The first null hypothesis tested was: $H_{01}$: Gender is independent of completion of a formalized smoking cessation program.

Fisher’s exact test was used to test the hypothesis that there is no relationship between gender and completion of a smoking cessation program. This procedure is a statistical technique that evaluates the null hypothesis when there are not enough sample observations in a 2X2 contingency table. The sample size for this study was 18 participants at enrollment and 10 at the end of the program. No relationship was found between the two variables (Table 2).

Race and completion/non-completion. The second null hypothesis tested was: $H_{02}$: Race of smokers is independent of completion of a formalized smoking cessation program.

The chi-square test was used to examine the relationship between race and completion/non-completion of the smoking cessation program. This is “the most widely used nonparametric procedure and is used when variables are measured on the nominal scale” (Polit, 1996, p. 221). It is designed “to make inferences about population differences in proportions between two or more groups” (Polit, 1996, p. 221). Results indicated that there was no relationship between race and completion/non-completion of a smoking cessation program, and the null hypothesis could not be rejected (Table 2).
Table 2

*Relationship of Sex, Race, Education, and Age to Program Completion*

<table>
<thead>
<tr>
<th></th>
<th>Total #</th>
<th>Program Completed</th>
<th>Program not Completed</th>
<th>Statistical method</th>
<th>Test-Statistical value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>7</td>
<td>5</td>
<td>Fisher’s</td>
<td>exact test</td>
<td>1.0</td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>18</td>
<td>10</td>
<td>8</td>
<td>Pearson’s</td>
<td>2.96</td>
<td>.0228</td>
</tr>
<tr>
<td>AIA*</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>Chi-Square</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>14</td>
<td>9</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>18</td>
<td>10</td>
<td>8</td>
<td>Fisher’s</td>
<td></td>
<td>.664</td>
</tr>
<tr>
<td>High</td>
<td>10</td>
<td>5</td>
<td>3</td>
<td>exact test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>18</td>
<td>10**</td>
<td>8***</td>
<td>Mann Whitney</td>
<td>18.5</td>
<td>.056</td>
</tr>
</tbody>
</table>

Note. *AIA = American Indian or Alaskan; **Mean Rank = 11.65; ***Mean Rank = 6.81*
*Education and completion/non-completion.* The third null hypothesis tested was: \( H_{03} \):

Educational level of smokers is independent of completion of a formalized smoking cessation program.

The Fisher's exact test was also used to examine the relationship between education and completion/non-completion of the smoking cessation program. Again, no relationship was found and the null hypothesis could not be rejected.

*Age and completion/non-completion.* The fourth null hypothesis tested was: \( H_{04} \): The median age of smokers is the same for the two groups of smokers i.e., those who completed and those who did not complete a formalized smoking cessation program.

The \( t \)-test was not considered to examine the relationship between age and completion/non-completion of the program due to insufficient number of observations for the study. The Mann-Whitney \( U \)-test was used to test this hypothesis. It is a nonparametric test used for independent samples that "tests the null hypothesis that two population distributions are identical against the alternative hypothesis that the distributions are not identical" (Polit, 1996, p. 203). The results of this test demonstrated that there was no relationship between age and completion/non-completion status.

*Descriptive Analysis*

In addition to the four statistical hypotheses tested, one research question was asked: RQ1: What factors of a formalized smoking cessation program do participating smokers perceive influenced them to complete the program?

The researcher examined this question through a qualitative descriptive analysis of responses to four questions in a researcher-developed data collection instrument (Appendix
A). The findings with analysis, interpretation and discussion in this aspect of the study were as follows.

The first question in this section was: "Of the five classes in the Smoking Cessation Program which one stands out for you? And why?" The ten participants reported the importance of the classes and their responses were distributed equally among the choices, from class #1 through class #5. The results are presented in Table 3.

Table 3

*Ranked Importance and Rationale for Selecting the Smoking Cessation Classes*

<table>
<thead>
<tr>
<th>Class #</th>
<th>The Reason</th>
<th># of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Watched video</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Meditated</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Provided benefits of quitting</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Follow up</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Achieved certificate of completion</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>Set a quit date</td>
<td>1</td>
</tr>
</tbody>
</table>

The second question in this section was: "Of the five, which influenced you the most in completing the Program? And why?" The most frequently noted aspect of the program that reportedly influenced the participants, was preparation to quit in class #1. The results from the participant narratives are displayed in Table 4.
Table 4

*Influencing Factors of the Classes in the Decision to Quit Smoking*

<table>
<thead>
<tr>
<th>Class #</th>
<th>The influencing factor</th>
<th># of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Meditation</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>Preparation to quit</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Stress management</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Follow-up</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No one factor influence</td>
<td>1</td>
</tr>
</tbody>
</table>

The third question in this section was: “Which parts of these five classes were most helpful?” The noted elements of the program selected by the respondents were reporting progress and making a game plan, and the use of prescription (Wellbutrin [bupropion] and nicotine patches). Table 5 presents the frequency of answers to this question.

Table 5

*The Most Helpful Elements of Classes in the Smoking Cessation Program*

<table>
<thead>
<tr>
<th>Class #</th>
<th>The helpful part</th>
<th># of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Reporting progress and making game plan</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>Prescription for Wellbutrin (bupropion) and nicotine patches</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Meditation</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Learning high risk situations</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Stress management</td>
<td>1</td>
</tr>
</tbody>
</table>
The fourth question in this section was: "Which parts of the Smoking Cessation Program were least helpful? And why?" Most of the participants of FFNP who completed the program did not find any of the classes least helpful, but two of the participants who completed the Program reported meditation as least helpful, 1 member reported discussions and 1 another member reported visit with a physician as the least helpful aspects of FFNP.

Discussion

This study was intended to examine the factors related to smokers’ successful completion of a smoking cessation program. It was structured to address four hypotheses and one research question.

The data for the study were collected from a group of eighteen smokers who were enrolled in a smoking cessation program at Ming Facility, Kaiser Permanente, Bakersfield, California during winter of 2005. Analysis of the study results revealed that successful completion of the smoking cessation program was independent of the factors of gender, race, education and age.

A qualitative descriptive analysis was conducted using a researcher-designed survey instrument to analyze the programmatic elements of the smoking cessation program. Participants of this study reported that their successful completion of the program was influenced by certain aspects of the program compared to the overall program. Preparation to quit as presented at class #1, and meditation and stress management discussed in class #3 were regarded as influential by many. The majority of the smokers enrolled in the FFNP did not specify which of the five classes were least helpful to their successful completion of the program. Two of the participants found meditation helpful but two others found meditation the least helpful. Discussions and interaction were each selected by three participants, but
neither component was selected as important for any of the other participants. Three participants chose prescription medicines as the most helpful. A one-on-one physician-visit was not a favored choice by any participants. Four of the participants found information regarding health consequences and making game plans were positive factors, but one participant found it of no use to help in completion of the smoking cessation program.

The FFNP classes were pre-packaged for the smoking cessation classes at Kaiser Permanente. Thus the program had only one approach for participants of varying backgrounds. Lack of opportunity to customize the program to the needs of individual members was viewed negatively by participants, as reflected in their written comments. Level of trust at the time of discussions and meditations was also an issue. “I could not close my eyes not knowing who is in the room with me when I have my purse under the table” was mentioned as a concern by two of the participants. FFNP members’ conversations with the researcher included negative comments regarding the individual visit with a physician. This concern was voiced by one of the participants “In spite of the advertisements, the actual prescription was a pre packed one-for-all.”
Chapter 5
Summary, Conclusions and Recommendations

Summary

The purpose of this study was to examine the factors related to smokers who complete a formalized smoking cessation program. The conceptual model that informed this study focused on the programmatic elements related to smoking cessation. Study participants were men and women who smoked cigarettes and were enrolled in the FFNP, a formalized Smoking Cessation Program, offered by KP. The smoking cessation program offered by KP is a formalized series of five classes consisting of Preparing to Quit, Quitting, Staying Quit, Staying Quit Encore, and Follow-Up. Self-reported factors were the participant's perceptions of the programmatic components that influenced the decision to stop depending on cigarette smoking. Data were analyzed using quantitative measurements and qualitative descriptive, content analysis. Non-parametric tests were used to assess four hypotheses containing demographic factors related to successful completion of the program.

The setting of this study was the Kaiser Permanente (KP) Ming Medical Facility in Bakersfield, California. This facility is a large, health maintenance organization that provides services to the local population. KP offers a Smoking Cessation Program (also known as Freedom From Nicotine Program [FFNP]) as a free service for KP members and as a paid service to nonmembers. The study was conducted in a classroom at KP during its offering of FFNP for a group of enrolled smokers. The time frame of the study was during the winter of 2005.

The research data collection occurred in two sessions: demographic data were collected at the first session of FFNP, and the researcher-developed four-question survey was
administered at the end of the last session of FFNP. The final samples of participants ranged between the ages of 27 and 68 years old, with diverse ethnic backgrounds. Most of them were white not Hispanic. Educational levels varied between less than high school diploma to graduate level education. The total number of volunteer participants for this study was 18, 10 of which completed the smoking cessation program.

Conclusions

The researcher studied a group of smokers enrolled in a smoking cessation program. Demographic variables, including gender, race, education and age, were examined for their association with successful completion of the program. All of the four variables were found to be independent of relationship with completion or non-completion of the smoking cessation program. The researcher examined participant perceptions of components of the Program through a qualitative descriptive analysis of responses to four questions presented in the form of a researcher-developed survey instrument. As perceived and reported by the participants, components of the smoking cessation program were found to be favored by some participants but considered not helpful by others.

The present study identified no relationship between the variables studied and the successful completion of this smoking cessation program. Analysis of the programmatic components of the smoking cessation program could be used to change the program for increased success based on the information provided by the participants' comments. An individual physician visit may not be worth the time and money if the prescription would be "a canned package," as one participant noted.
Recommendations

This study was completed with statistical analysis using non parametric tests due to such a small number of observations. Therefore the study results could not be generalized to a larger population or to a different location. It is recommended that additional studies on this issue be conducted with a larger sample using the same demographic variables in order to more effectively target those who potentially might benefit from the smoking cessation program.

Implications for Nursing Research, Education and Practice

The present study has identified factors self-reported by smokers related to successful completion of a smoking cessation program. These findings show a need for further nursing research on a larger scale using the same demographic variables. These variables can give the educators and practitioners some clues as to the direction of interventions to help smokers to successfully quit their habit.
References


Hennrikus, D., Jeffery, R., Lando, H., Murray, D., Brelje, K., Davidann, B., et al. (2002). The success project: The effect of program format and incentives on participation and


Appendixes
Appendix A

Data Collection Instrument

_**Purpose:**_ The purpose of this data collection instrument is to examine the programmatic elements related to smokers' successful completion of a Smoking Cessation Program.

_**Instructions:**_ You are invited to participate in a four-question survey, divided into two parts. Background information will be collected at the 1st session of your Freedom From Nicotine Program, and the four-question survey at the last session. You may stop participating in this study at any time with no penalty.

_**Confidentiality and Alternative Procedures:**_ You are guaranteed confidentiality, privacy and anonymity. The researcher will not identify any participant by name. All written notes will be stored in a locked briefcase at the researcher's home. Only the researcher and the members of her thesis committee will see the information. All the collected information will be destroyed after five years.

_**Scoring:**_ There are no right or wrong answers to the questions.

**Part 1: Background information**

Demographics

Age_______ Male_______ Female_______

Racial/Ethnic Group:
- American Indian or Alaskan Native_______
- Asian or Pacific Islander _______
- Black, not of Hispanic Origin ______
- Hispanic ________
- White, not of Hispanic origin ______

Highest Educational Level:
- Some high school _______
- High School Graduate _______
- Some College _______
- College Graduate _______
- Some Graduate School _______
- Degree from Graduate School _______
Data Collection Instrument

*Purpose:* The purpose of this data collection instrument is to examine the programmatic elements related to smokers' successful completion of a Smoking Cessation Program.

*Instructions:* You are invited to participate in a survey that includes some background information and a four-question survey, divided into two parts. Background information will be collected at the 1st session of your FFNP, and the four-question survey at the last session of your FFNP. You may stop participating this study at any time with no penalty.

*Confidentiality and Alternative Procedures:* You are guaranteed confidentiality, privacy and anonymity. The researcher will not identify any participant by name. All written notes will be stored in a locked briefcase at the researcher's home. Only the researcher and the members of her thesis committee will see the information. All the collected information will be destroyed after five years.

*Scoring:* There are no right or wrong answers to the questions. Please answer these questions the best you can.

**Part 2: A four-question survey.**

1. Of the five classes in the Smoking Cessation Program which one stands out for you? And why?

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

II. Of the five classes, which influenced you the most in completing the Program? And why was this so?

   ________________________________________________________________
   ________________________________________________________________
III. Which parts of these five classes were most helpful?

IV. Which parts of the Smoking Cessation Program were least helpful? And why?
Appendix B
Letter to Obtain Access to the Participants

May 25, 2004

Department of Nursing
California State University
Bakersfield, CA 93311

Ms. Angie Cave-Brown
Director of education, Kaiser Permanente
93311 Ming Medical Offices, Bakersfield, CA.

RE: Request to Access Participants in Freedom From Nicotine Program.

Dear Ms. Cave-Brown,

I am writing to you to request access to the Freedom From Nicotine Program in Kaiser Permanente smoking cessation, for a study entitled “Factors Related to Smokers Successful Completion of a Smoking Cessation Program” (FFNP). This study is part of my course work as a master’s student in the graduate program at CSUB.

I will conduct a pilot study with three of the participants of the FFNP preceding the study. I will invite all the study participants of the FFNP during the fall of 2004 to participate in the study. Strict confidentiality will be maintained during and after the collection of data, and during the research analysis. I will obtain IRB approval prior to contacting the participants.

Dr. Marie P. Farrell is my thesis advisor at California State University, Bakersfield. You may contact her at the office for any concern: # 661-664-2060. If you have any questions regarding a person’s treatment as a research participant please contact Dr. Steve Suter at 661-663-2373, University Research Ethics Review Coordinator, California State University, Bakersfield, CA.

Sincerely,

Valsamma J. Chandy
October 26, 2004

Valsamma J. Chandy
Kaiser Permanente KITS Coordinator
8800 Ming Avenue
Bakersfield CA 93311

Dear Ms. Chandy:

We received your request for permission to access information associated with Health Education's Freedom from Nicotine Program for your CSUB study entitled, "Factors Related to Smoker's Successful Completion of a Smoking Cessation Program." We also understand that you will conduct the pilot study with three of the participants preceding the study.

I have discussed your request with Mary Jane Rosenblatt, Associate Medical Group Administrator at Kaiser Permanente. Ms. Rosenblatt has approved your request, conditional upon your agreement to maintain strict confidentiality during and after the collection of data and during the research analysis.

If you have any questions or concerns, please contact me at 661-664-3711. I wish you well with your pilot study and all future educational endeavors.

Sincerely,

Angie Gave-Brown, RN, BA
Health Education Administrator
Kaiser Permanente Kern County

cc: M. Farrell, CSUB
    M. Rosenblatt
Appendix C

Institutional Review Board for Human Subjects Research

Date: 02 October 2004

To: Valamma Chandy, Nursing Student

cc: Paul Newberry, IRB Chair
    M. Farrell, Department of Nursing

From: Steve Suter, University Research Ethics Review Coordinator

Subject: Exemption from Full Review for Protocol 04-122

I am pleased to inform you that your request for exemption from full IRB/HSR review has been approved. You are authorized to begin your research entitled, "Factors Related to Smokers' Successful Completion of a Smoking Cessation Program." This research activity is exempt as defined in Paragraph 48.131 of Title 45, Code of Federal Regulations based on the following criteria: (1) Research involving the use of standardized educational tests (cognitive, diagnostic, aptitude, achievement) survey procedures, interview procedures, or observation of public behavior, UNLESS: (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects, and (b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation. Approval is based on your original materials submitted on 23 September 2004 and your revised materials submitted in response to reviewer comments on 01 October 2004.

The following person(s) only are authorized to interact with subjects in collecting data or obtaining informed consent:

Human Subjects Protection Training Certified:
Valamma Chandy (9-13-04)

This authorization will be valid until the end of September 2005. If more time is needed, you must request an extension from the Board. If you have any questions or if there are any changes to your protocol, please notify me immediately. Thank you.

[Signature]
Steve Suter, University Research Ethics Review Coordinator
Appendix D

Informed Consent Form

Exploring the factors of a successful smoking cessation program.

Purpose: The purpose of this data collection instrument is to examine the programmatic elements related to smokers' successful completion of a Smoking Cessation Program.

Description of the Study: I will be collecting data from all the participants of the FFNP, to complete the first session and the last session. Each survey will take approximate 15 minutes or less. I will distribute the survey at the end of both the FFNP sessions.

Benefits: There is no direct benefit to participating in this study, but as a token of appreciation you will receive a lottery ticket both times, after you complete the survey.

Risks: There are no psychological or physical risks expected as a result of participating in this study and you may withdraw from the study at any time during the process without penalty.

Confidentiality and Alternative Procedures: You are guaranteed confidentiality, privacy and anonymity. The researcher will not identify any participant by name. All written notes will be stored in a locked briefcase at the researcher’s home. Only the researcher and the members of her thesis committee will see the information. All the collected information will be destroyed after five years.

Participants’ Assurance: Your participation in this study is entirely voluntary and you may withdraw at any time. The information gathered will be kept confidential and you will remain anonymous.

Contact Persons:
1. If you have any questions regarding the study please contact:
   • Ms. Valsa Chandy at 661-663-9530, the researcher.
   • Dr. M. Farrell at 661-664-2060, Thesis Advisor and Chair, California State University, Bakersfield, CA.

2. If you have any questions regarding a person’s treatment as a research participant please contact:
   • Dr. Steve Suter at 661-663-2373, University Research Ethics Review Coordinator, California State University, Bakersfield, CA.
Consent is hereby given to participate in the study entitled:

**Exploring the factors of a successful smoking cessation program.**

I am a graduate student from California State University, Bakersfield, and department of Nursing. I am studying motivating factors of smokers to complete a smoking cessation program.

Your participation in this study is entirely voluntary and you may withdraw at any time. There are no benefits other than receiving a token of appreciation from me: a lottery ticket; and the opportunity to participate in research related to Smoking Cessation. The copy of this consent-form provided is for you to keep.

**Contact Persons:** If you have any questions regarding the study please contact me, Valsa Chandy at 661-663-9530, or Dr. Marie Farrell, Thesis Advisor and Chair, Department of Nursing, California State University, Bakersfield, CA at 661-664-2060.

If you have any questions regarding a person’s treatment as a research participant please contact Dr. Steve Suter at 661-663-2373, University Research Ethics Review Coordinator, California State University, Bakersfield, CA.

__________________________________________  ____________________________________________

Signature of the research participant                  Date

__________________________________________  ____________________________________________

Signature of the researcher                           Date
## Appendix E

### Code Book

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<th>Demographic</th>
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