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Explorations of Self-Efficacy:
Personal Narratives as Qualitative Data in the Analysis of Smoking Cessation Efforts

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Explorations of Self-Efficacy: Personal Narratives as Qualitative Data in the Analysis of Smoking Cessation Efforts

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Abstract

Research has found that an individual's perceived self-efficacy, supported by goals and the acceptance of potential obstacles, has the ability to assist in behaviour modification. By examining the narratives of cardiovascular patients undergoing smoking cessation counselling, this research highlights factors that individuals communicate in their narratives regarding changes to self-efficacy throughout the process of smoking cessation. As such, the study examines how social cognitive theory explains individuals' abilities to change their addictive behaviours. Narrative analysis is used to establish those factors that cardiovascular patients assert to be motivating or impeding factors in their smoking cessation efforts, particularly in relation to their initial readiness to quit smoking. The findings are significant for the health domain regarding the implementation of new smoking cessation counselling practices, and for the field of communication, underlining the value of narrative analysis and interpersonal communication as tools in producing detailed results based on rich and comprehensive qualitative data.

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List of Abbreviations

LHIN – Local Health Integration Network

MN – Motivated Non-Success

MS – Motivated Success

UOHI – University of Ottawa Heart Institute

RN – Resistant Non-Success

RS – Resistant Success

SELD - Self-Efficacy List for Drug users

TTM - Transtheoretical Model (of health behaviour change)

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Chapter One: Introduction

Each year, on average, more than 37,000 tobacco-related deaths occur in Canada. Despite being the single most preventable cause of premature death in the country, tobacco use and exposure are responsible for more deaths than traffic injuries, alcohol, murder and suicide combined (*About Tobacco Control*, 2007). Tobacco-related diseases place a significant burden on the country's healthcare system and, as such, are a concern of all levels of government and the Canadian public at large.

Background

Federal and provincial governments have implemented numerous intervention programs and anti-smoking regulations to assist smokers in their cessation efforts and to reduce the burden placed on the health care system by the health problems attributed to smoking. The federal government, for example, has implemented *Go Smokefree*, a program aimed at providing information on tobacco-related acts and regulations, in addition to tools to assist in smoking cessation, in an attempt to motivate Canadians to quit smoking (*Go Smokefree*, 2006). Between 1985 and 2005, smoking prevalence in Canada decreased significantly in all age groups, with overall prevalence falling by 15 percent (*Canadian Tobacco Use Monitoring Survey,* 2005). Despite the apparent impact of these programs, however, many smokers find difficulty in their cessation attempts, largely due to a lack of confidence and a perception that the barriers to quitting greatly outweigh the benefits.

Referring to factors that play a role in behaviour change, Lieberman (2001) discusses the concept of *self-efficacy* -- an individual's perceived ability to successfully perform a specific task -- as predictive of the outcome of that action. Further, Bandura

(2004) indicates that, rather than simply expressing a desire to modify health behaviour, changing health habits requires motivational and self-regulatory skills, and necessitates that people learn to closely observe their health behaviours and create personal incentives to support their efforts.

Smoking has been the topic of numerous studies employing the use of narrative analysis to examine health behaviour change. However, little to no research exists that uses this methodology to study the relationship between an individual's initial perceived readiness to execute a health behaviour change and the outcome of that person's efforts, particularly in comparison to individuals with different initial readiness levels and different outcomes.

The inpatient smoking cessation program presented by the University of Ottawa Heart Institute (UOHI) provides the opportunity to examine the narratives of patients who have participated in smoking intervention counselling. In communicating their experiences, participants provided narratives that were analyzed to determine the factors that smokers themselves say motivate or impede their cessation attempts.

Therefore, this study has been conducted by employing the theoretical framework of social cognitive theory with particular emphasis on self-efficacy, using the UOHI inpatient smoking cessation program as a study environment, and narrative inquiry and analysis as methodological tools by which to examine the theoretical framework in the context of the given setting.

Theoretical Foundation

In accordance with its focus on the motivating and impeding elements experienced during the process of a health behaviour change, this study's theoretical context rests within the theory of social cognition.

Bandura (2000) defines *social cognitive theory* as "a multifaceted causal structure in which self-efficacy beliefs operate in concert with cognized goals, outcome expectations, and perceived environmental impediments and facilitators in the regulation of human motivation, action, and well-being" (p. 300). Bandura (1986) emphasizes that, within this conceptual framework, individuals are not directed entirely by internal motivation, nor are they driven solely by external incentives. "Rather, human functioning is explained in terms of a model of triadic reciprocality in which behaviour, cognitive and other personal factors, and environmental events all operate as interacting determinants of each other" (p. 18). Further, Bandura (1997) explains that human behaviour is in large part regulated by the application of self-influence operating through various sub-functions, including an individual's self-monitoring of his or her behaviour, and judgement of that behaviour in relation to both personal standards and environmental norms.

As a central determinant within social cognitive theory, self-efficacy is described as an individual's confidence in his or her ability to coordinate and carry out the actions necessary to produce a given accomplishment, working in concert with perceived personal competence and perceived obstacles and costs (Bandura, 2000; Abraham and Sheeran, 2000).

Bandura (1997) explains that self-efficacy is a "generative capability" in which various skills, including cognitive, social, emotional, and behavioural, must be controlled by the individual and executed to serve in various situations (p.37). Emphasizing the difference between possessing these skills and having the ability to execute them in challenging situations, Bandura (1997) states the following:

> "Self-referent thought activates cognitive, motivational, and affective processes that govern the translation of knowledge and abilities into proficient action. In short, perceived self-efficacy is concerned not only with the number of skills you have, but with what you believe you can do with what you have under a variety of circumstances" (p. 37).

Therefore, because beliefs regarding one's self-efficacy act as a key factor in human competence, different people with similar skill sets, or one individual operating in varying situations, may execute their skills inadequately, capably, or exceptionally, depending on the variability of their perceived self-efficacy (Bandura, 1997).

Bandura and Locke (2003) also indicate that perceived self-efficacy can forecast the behavioural distinctions between different people at varied stages of efficacy, as well as predicting variation within the same person throughout the behaviour change process. Further, because environmental and social factors cause modifications in self-efficacy throughout a behaviour change, people must continually observe their levels of self-efficacy to maintain their motivation and to overcome strenuous emotional situations and burdening thought patterns (Bandura and Locke, 2003).

Bandura (1989) maintains that an optimistic sense of self-efficacy is required in order to achieve personal accomplishments. Everyday social situations contain numerous difficulties, including failures, setbacks, and frustrations. According to Bandura (1989), in order to succeed in these situations, people must have a vigorous sense of personal

agency. Although it is natural for self-doubt to arise in the midst of difficulties, Bandura (1989) asserts that the essential component to overcoming this self-doubt is the resiliency of the individual and the speed at which the person allows his or her personal agency to once again raise his or her self-assurance.

Self-efficacy theory is particularly relevant to the following study, as it provides a theoretical context on which to place the narratives of patients as they offer accounts of the specific factors that assisted or hindered their smoking cessation efforts. Upon entering the UOHI smoking cessation program, patients identify their readiness to quit smoking. This study analyzes perceived barriers and levels of confidence in the context of social cognitive theory to examine how self-efficacy levels are first established and then altered throughout the process of a health behaviour change, ultimately affecting the outcome of that endeavour.

Central Research Questions

The central research questions in this study are: What are motivating factors in the smoking cessation efforts of cardiovascular patients? What are impeding factors in the smoking cessation efforts of cardiovascular patients? How are these factors revealed through narrative analysis of patients' own communication regarding their smoking cessation experiences?

Methodology

In order to address the central research questions, this study examines the narratives of cardiovascular patients from the UOHI inpatient smoking cessation program, which determines patients' counselling needs based on their readiness to quit. The aim of this study is to investigate themes in behaviour change in relation to self-

efficacy. More specifically, the narratives of patients in four sub-groups are analyzed to identify differences in the motivating and hindering factors affecting their smoking cessation efforts. These sub-groups include those individuals initially eager to quit smoking who eventually succeeded in doing so; those originally eager to quit who ultimately failed to do so; those initially resistant to quitting who eventually succeeded in cessation; and those originally resistant who ultimately failed to quit.

This study has been conducted through a narrative analysis of telephone interviews completed with a sample of cardiovascular patients who were admitted to the UOHI inpatient smoking cessation program approximately six-to-eight months prior to the time of taking part in their interviews. Narrative analysis was chosen as a methodology to gain a thorough understanding of the ways in which social cognitive theory explains individuals' capacities or inabilities to change their addictive behaviours. Patient narratives provide rich and detailed accounts of individuals' experiences throughout the process of attempted behaviour changes. As such, this methodology acts as a lens through which patterns in thought and language are exposed to more accurately depict the achievements gained and the challenges overcome by people attempting to change their smoking behaviours.

Structure

The following chapters work to create a comprehensive understanding of the ways in which smokers' narratives explain the role played by self-efficacy in the process of ending nicotine addictions.

Chapter Two, entitled *Theoretical Framework and Literature Review*, provides a context for the subject of social cognitive theory as a model of health behaviour change.

More specifically, it discusses research indicating the ways in which self-efficacy works together with goals, expected outcomes and perceived obstacles to assist in behaviour modification. This chapter also examines the effects of interventions on individuals' self-efficacy levels and abilities to quit smoking. Further, this chapter discusses narrative analysis as a methodological tool in which to determine patterns in the factors that motivate or hinder patients' smoking cessation attempts.

Chapter Three, *Research Design and Methodology*, outlines the research strategy used and offers a justification for the narrative analysis approach selected to investigate the central research questions. Further, this chapter summarizes the narrative analysis method employed in this study, including the criteria used to determine the use of this method, and the reasons for rejecting other research method options.

Chapter Four, *Results and Analysis*, reviews the study's key findings and places them in the context of both the central research questions and the literature examined in previous chapters.

Finally, Chapter Five consists of a discussion of what the study's key findings suggest for the health domain during the implementation of new policies and both in-hospital and community service smoking cessation practices. Further, this chapter discusses the significance of the study's findings for the field of communication, with specific reference to the value of narrative analysis as a tool in producing detailed results based on rich and comprehensive qualitative data.

Chapter Two: Theoretical Framework and Literature Review

This chapter will provide context for the subject of social cognitive theory as a model of health behaviour change. More specifically, it will discuss research indicating the ways in which self-efficacy works to assist in behaviour modification. This chapter will also examine the effects of intervention on individuals' self-efficacy levels and abilities to quit smoking, making specific reference to the UOHI inpatient smoking cessation program. This chapter's subsections pay particular attention to social cognitive theory as a model for health behaviour change, with reference also to the role played by interventions in addiction therapy, and an outline of the project's research rationale.

Social Cognitive Theory as a Model of Health Behaviour Change

Bandura (2000) explains social cognitive theory as a structure created by an individual's beliefs regarding his or her self-efficacy, perceived goals and expectations, and the factors that the individual believes will facilitate or impede his or her actions. Bandura (2004) maintains that social cognitive theory outlines a set of central determinants, the means through which they function, and the best way of translating this knowledge into useful health practices. These determinants include *knowledge* of the risks and benefits of various health routines; *perceived self-efficacy* that a person can exert control over his or her health behaviour; *outcome expectations* regarding the presumed risks and benefits related to various health behaviours; the health *goals* individuals create for themselves, and the approaches to meeting them; and the *perceived facilitators* and *impediments* to the health behaviour changes individuals attempt. To this end, research has found that those who believe they will succeed, and perceive that the benefits of their preventative actions outweigh the costs, are more likely to initiate

behaviour change than those who possess less *personal agency*, a term frequently interchanged with the terms *personal efficacy* and *self-efficacy* in academic literature (Bandura, 2004; Bandura, 2000; Bandura and Locke, 2003; Shadel and Cervone, 2006; Van Der Rijt and Westerik, 2004).

The present study will focus closely on one particular determinant within social cognitive theory -- *self-efficacy* -- to determine the factors that smoking cessation patients say motivate or hinder their efforts to quit smoking. Bandura (2000) defines self-efficacy as "beliefs in one's capabilities to organise and execute the courses of action required to produce given levels of attainments" (p. 300). Self-efficacy can also be defined in terms of "perceived personal competence or confidence," and can include measures of perceived obstacles and challenges (Abraham and Sheeran, 2000, p. 6). Bandura and Locke (2003) posit that investigation into perceived self- efficacy is essential to theories of motivation and behaviour change, including the theory of social cognition.

Research by Bandura (2004) illustrates that an individual's belief in his or her efficacy to apply self-regulation is often a conduit through which psychosocial influences affect health behaviour. Further, Bandura (2004) emphasizes that this central belief in one's own self-efficacy affects each stage of behaviour change, from considering a change in health behaviour, to gathering the personal motivation needed to act on this health change, to overcoming obstacles and recovering from setbacks, to maintaining the change in health behaviour once it has been initially achieved.

Self-efficacy is also shaped by a number of factors, including experiences with success and failure, social influences, persuasion produced by others, and physical and

emotional states that may be understood as an individual's susceptibility to failure (Fiorentine and Hillhouse, 2003).

Central to social cognitive theory's principles of behaviour change, self-efficacy theory is based on four key premises: Levels of self-efficacy influence the specific goals that individuals pursue; self-efficacy determines the amount of effort exerted to achieve these goals; self-efficacy influences how long individuals will persist in the quest for their goals in the face of obstacles; and self-efficacy affects the probability of the goal being obtained (West, 2006). As such, an individual's self-efficacy levels affect each stage of behaviour change. Lieberman (2001) maintains that, from the initiation of a behaviour change, self-efficacy is predictive of future actions; that is, when an individual has high self-efficacy, he or she is more likely to turn knowledge into active behaviour. Further, an individual's willingness to attempt more difficult challenges increases with heightened self-efficacy, and can raise the person's self-efficacy even further (Lieberman, 2001).

Meta-analyses examined by Bandura and Locke (2003) demonstrate that perceived self-efficacy can predict the behavioural differences between people at varied stages of efficacy, as well as forecasting "changes in functioning in individuals at different levels of efficacy over time and even variation within the same individual in the tasks performed and those shunned or attempted but failed" (pp. 87-88). Moreover, the authors have found that individuals must judge their levels of self-efficacy not only to uphold their motivation and focus but also to overcome difficult emotional situations and self-encumbering thought patterns.

Similarly, Bandura (2000) found that, although self-efficacy is concerned with an individual's perception of his or her ability to perform a certain action, this personal agency must be exercised over a diverse variety of events and circumstances. This may include adapting one's motivation, thought patterns, emotional states, or environmental conditions, depending on the behaviour change being sought. In his research on the self-management model, Bandura (2004) indicates that, rather than using only acts of will, changing health habits requires that people increase their motivational and self-regulatory skills, in addition to learning to monitor their health behaviours and to create incentives to support their efforts.

Gecas (1989) argued that more research was needed to clearly outline the motivational foundations of self-efficacy, asserting that it is not entirely clear "how and why self-efficacy changes or remains stable over the life course, how it is related to other aspects of self and personality, how context-specific assessments of efficacy are related to one's general sense of self-efficacy, and how socio historical circumstances affect the development and consequences of self-efficacy" (p. 311). While there is substantial research to support the utility of self-efficacy in ending addictions, Gecas' questions illustrate that there has been less work done to identify the motivating factors that individuals themselves express as having affected changes in their addictive behaviours. These questions can be applied to those individuals lacking self-efficacy, as well as to those who feel they contain a reasonable level of personal agency but ultimately fail at such initiatives as ending addictions.

Self-Efficacy and Addictive Behaviours

The following section will discuss self-efficacy as it relates to various addictive behaviours, including eating disorders, alcoholism, and drug addictions.

In cases of addiction, research has illustrated that social cognitive theory, including theories regarding self-efficacy, is particularly relevant. Concerning drugs, for example, Powledge (1999) highlighted that, while most are capable of producing a physical dependence due to changes in brain function, some of these changes also play a role in psychological dependence, such as depression and craving, when the drug is stopped. Thus, although addictions have historically been viewed as physically problematic, dependence is, in fact, an issue that requires an individual's own self-efficacy to overcome.

Powledge (1999) further discussed the brain's "single pathway" around which all addictions centre; this pathway is known as the "reward circuit," and is the "brain system that governs motivated behavior" (p. 513). This pathway is involved in numerous addictions, including illegal drugs such as heroin and cocaine, but also in addictions to caffeine, alcohol, and tobacco. Although acknowledging that addiction experts are divided on the point, Powledge (1999) stated that this pathway may even be involved in addictions that do not involve drugs, such as gambling, sex, and eating.

Research by DiClemente, Fairhurst, and Piotrowski (1995) also indicated that there are many components to self-efficacy's assistance in the control of addictive behaviors. Further, and similar to claims made by Powledge (1999), DiClemente et al. (1995) agreed that the types of addiction that can be examined based on social cognition

and self-efficacy appraisal are numerous, and include eating disorders, alcohol problems, and drug abuse.

Eating Disorders

Eating disorders including obesity, anorexia and bulimia are often categorized as addictive behaviours because of their "appetitive nature, very high relapse rates, and the experience of loss of control" (DiClemente et al., 1995, p. 125). Further, despite a number of differences in the methods used to assess weight control self-efficacy, the role that it plays in an individual's achievement of eating behaviour change is very similar to that involved in smoking cessation (DiClemente et al., 1995).

A study by Linde, Rothman, Baldwin and Jeffery (2006) examined relationships between patients' self-efficacy beliefs, weight control behaviors, and changes in weight among individuals involved in a weight loss trial. Specifically, the study examined how individuals' perceptions of their self-efficacy towards eating and exercise influenced their weight outcomes. The findings of their study indicate that people who successfully perform weight control behaviours report relatively high levels of self-efficacy for those behaviours. Important to note, however, is that initial self-efficacy beliefs of individuals who participated in this study predicted weight loss outcomes during active treatment but not during the post-treatment period (Linde et al., 2006). This finding suggests that self-efficacy, while acting as an important determinant in the decision to initiate a new pattern of behaviour, may be less important than an individual's desire to continue that action once the initial successful behaviour change has been achieved.

In another study related to self-efficacy and eating disorder symptoms, Berman (2006) investigated the relationship between eating self-efficacy and the "behavioral and

psychological characteristics associated with eating disorders in a non-clinical sample of adults" (p. 79). The results of this study indicate that a person's low confidence in his or her ability to control eating while also feeling negative emotions was linked to greater anxieties about weight and bulimic thoughts and behaviours. Further, study results showed that low confidence in the ability to control eating when a large quantity of food was available was associated with feelings of ineffectiveness and negative self-assessment. According to Burman (2006) the study's key findings indicate that confidence in one's ability to resist eating while experiencing pessimistic emotions is negatively related to scores on the researcher's "Drive for Thinness" and "Bulimia" scales. As such, Burman (2006) suggests that it is important to determine how to increase self-efficacy when patients are dealing with negative emotions.

Ultimately, research indicates that evaluations of self-efficacy are useful predictors in weight loss, with few other concepts predicting weight loss behaviour as accurately.

Alcoholism

Social cognitive theory and self-efficacy perception have also been associated with studies related to alcohol addiction. Research by DiClemente et al. (1995) indicates that very similar issues of motivation and change are relevant to both smoking cessation and alcohol addictions. Importantly, the authors note that both positive and negative self-efficacy are fundamental to the process of any health behaviour change; that is, positive efficacy as it relates to achieving abstinence, and negative efficacy as it relates to an individual's perceived weakness towards his or her addiction.

In a study regarding the change in self-efficacy expectancies during alcohol addiction treatment, Brown, Carrello, and Porter (1998) found that expectations about the reinforcing effects of alcohol and patients' levels of self-efficacy were significant factors in addiction relapse. Further, the research indicated that the degree to which these factors are modified during alcohol treatment may shed light on the process of changing addictive behaviours.

Brown et al. (1998) describe *alcohol effect expectancies* as an individual's level of expectation regarding the positive effects of alcohol. Analysis of participants in an inpatient alcohol and drug treatment program verified that "participants with lower expectations about the reinforcing effects of alcohol were more confident about their ability to resist drinking in high-risk situations. Conversely, participants with higher expectations about the positive effects of alcohol were less confident about their ability to resist temptations" (p. 161). Study results also indicated that alcohol effect expectancies and self-efficacy levels changed significantly over the course of a four-week treatment program. Specifically, larger decreases in alcohol effect expectancies were found in patients who had entered the program with less self-efficacy to resist drinking, compared to those who had entered with more confidence in their ability to resist alcohol. Ultimately, results from the study indicated that it is useful to target both expectancies and self-efficacy in substance abuse treatment.

Research by Burling, Reilly, Moltzen, and Ziff (1989) examined monthly in-treatment ratings of self-efficacy to avoid drug and alcohol abuse among 419 substance abuse patients. Findings indicated that self-efficacy changed uniformly across treatment and significantly affected patient treatment outcomes; that is, those who abstained from

alcohol had higher overall self-efficacy levels than those who relapsed. Further, results of this study indicated that the confidence of patients to avoid relapse in particular situations increased with treatment and was higher among abstainers than those who relapsed. This suggests that drug and alcohol inpatients are similar to other addict groups with regards to self-efficacy.

Drug Addictions/Substance Abuse

DiClemente et al. (1995) noted that the lack of self-efficacy research in the area of drug abuse is almost certainly related to scepticism regarding self-reports, especially when referring to illegal substances. However, the researchers also noted that, although issues such as self-deception and social desirability are considerable barriers to correctly assessing an individual's self-efficacy to abstain from drugs, the same barriers are present to a lesser extent in both smoking and alcohol addictions and are, therefore, comparable.

In a study evaluating the "psychometric properties of the Self-Efficacy List for Drug users (SELD)," De Weert-Van Oene, Breteler, Schipers, and Schrijvers (2000) revealed that drug users' self-efficacy could be best illustrated by three components: environmental factors, negative mood, and positive mood (p. 599). In addition, it was found that lower self-efficacy levels were related to a higher number of days during which a patient experienced problems related to drug use. Of particular importance, the study found that self-efficacy is not a consistent characteristic of each individual drug user but, rather, depends on the situation in which the user finds himself.

The concept of self-efficacy is also central to the widely-accepted relapse prevention approach established by Marlatt and Gordon (2005). This method maintains that relapse into drug use after a stage of cessation has been achieved is influenced by

stress created through negative emotions, interpersonal tensions, and social pressures. Further, this approach holds that self reports of the ability to manage stressful situations without reverting to substance abuse reflects an individual's coping skills, thus assuming that those with high levels of self-efficacy during situational stress will be less likely to lose control and relapse. Similarly, DiClemente (2003) maintains that an individual's confidence often depends on the type or intensity of the situation presented. As an example, the author points out that a person may feel very confident in his or her ability to abstain from an addictive behaviour in social situations, but not at all confident about abstaining when frustrated or angry. As such, self-efficacy grows with the individual's successful management of his or her addiction in the various circumstances where the behaviour was previously predominant.

Further Models of Addictive Health Behaviour Change

In addition to social cognitive theory, self-efficacy is often referred to in association with a number of other addictive health behaviour theories, including the Transtheoretical Model (TTM), the Health Belief Model, and the Theory of Reasoned Action.

The TTM attempts to bring together a number of concepts that are used to treat problematic behaviours (Prochaska, Redding, Harlow, Rossi and Velicer, 1994). DiClemente (2003) maintains that the TTM "offers an integrative framework for understanding and intervening with human intentional behaviour change," as it contains a number of variables involved in the execution of a behaviour change (p. 22).

According to the TTM, the process of modifying an addictive behaviour involves numerous stages, including: *Pre-contemplation*, where the individual has thought of, but

not seriously considered, preventative action; *contemplation*, a stage involving consideration of both the benefits and risks of the behaviour change; *preparation*, where individuals assess their resources and create a plan for change; *action*, a phase that can last for three-to-six months, where the plan is implemented and adjusted to manage new challenges; and *maintenance*, the stage in which the individual must learn to sustain the behaviour change that has been achieved (DiClemente et al., 1995). Because the process of behaviour change involves a number of phases, it is important to note the level of self-efficacy that exists at each stage in order to assess what is required to move to a new phase of the change.

According to DiClemente (2003), it is during the *action* and *maintenance* stages of behaviour change that the role of self-efficacy is the most important. In the earlier stages of change -- *precontemplation, contemplation and preparation* -- self-efficacy perceptions are based on "hopeful expectations or feelings of despair rather than by an accurate evaluation of one's ability to abstain or stop the addictive behaviour" (DiClemente, 2003, p. 198). However, once the individual has attained some level of achievement, he or she is able to more precisely evaluate how difficult the overall behaviour change will be and what level of effort is needed to obtain and maintain an entirely new behaviour.

According to Prochaska et al. (1994), the TTM also contains two variables that facilitate movement between stages: decisional balance, in which a person weighs the pros and cons of a particular behaviour change; and self-efficacy, which indicates a person's confidence in his or her ability to perform the behaviour change, or abstain from the problematic behaviour in specific situations.

Meanwhile, the Health Belief Model asserts that two main factors affect the probability that an individual will adopt a suggested health change: He or she must feel personally threatened by a sickness with serious consequences, and the individual must believe that the benefits of taking the suggested preventative action offset the perceived barriers and/or costs of the action (Capella, Fishbein, Hornik, Kirkland Ahern, and Sayeed, 2001).

Conversely, the Theory of Reasoned Action maintains that there is one main determinant of a behaviour change – a person's intention to execute it. However, this theory holds that a person's intention to execute a behaviour change is a function of two factors: the individual's attitude regarding the cost and benefits of the change, and the perceived social pressure applied on him or her to perform the suggested behaviour (Capella et al., 2001).

Each of these models contains an element in common with social cognitive theory; that is, that the probability of a person executing a particular preventative action depends on a belief that the benefits will outweigh the costs. However, it is only the TTM that coincides with social cognitive theory's use of self-efficacy as a determinant of behaviour change. Bandura (2004) suggests that, while most models devote significant concentration to the prediction of health behaviours, they do not explain how they change health habits. Conversely, "social cognitive theory offers both predictors and principles on how to inform, enable, guide, and motivate people to adapt habits that promote health and reduce those that impair it" (Bandura, 2004, p. 146).

DiClemente (2003) indicates that there are a number of factors involved in the process of ending an addiction. These include personality and individual characteristics

such as impulsiveness and compulsion; family influences, which play a role in the development of attitudes, expectancies and beliefs; interpersonal relationships, which may invoke peer pressure; social support for the behaviour, which may include a social network that does or does not engage in the addictive behaviour, thus respectively hindering the individual from succeeding in cessation, or motivating him or her to quit smoking; and social factors, including government policies and societal norms such as laws against certain actions like illegal substance use. Bandura (2000) also cites social influences as having a significant impact -- either positively or negatively -- on an individual's ability to change an addictive behaviour: "Depending on their nature, social influences can aid, retard or undermine efforts at personal change" (p. 313).

Recognizing differences in motivating and hindering factors related to ending addictions, Weiner (1996) makes a distinction between failures in behaviour modification that are associated with a lack of effort, and those that are linked to inability, stating: "Performance is relatively enhanced if it is accepted that the prior failure was caused by a lack of 'try' rather than to the absence of 'can'" (p. 213). As such, people's performance levels when attempting to reach their goals are higher if they attribute their previous failures to inadequate effort, rather than lack of ability. In order to fully determine the role of social cognition and the perceived efficacy factors associated with an individual's change in behaviour it is, therefore, beneficial to identify the motivating factors that influence all stages of the modification.

DiClemente et al. (1995) indicated that there are a number of target behaviours to which self-efficacy can be applied by those attempting to end an addiction: *Coping*, which focuses on an addict successfully managing specific distressful situations instead

of using an addiction; *treatment behaviour*, involving the addict's ability to perform behaviors such as self-regulation; *recovery*, which concentrates on the individual's ability to recover from a brief relapse into the addictive behavior; *control*, which focuses on the subject's confidence in the ability to maintain self-discipline in situations where he or she is provoked to return to the addictive behavior; and *abstinence*, concentrating on the individual's confidence in his or her ability to refrain from performing the addictive behaviour in situations that are cues to carry out that action. Research by DiClemente et al. (1995) indicated that an individual's evaluation of personal self-efficacy level at each stage within cessation attempts is significantly related to the methods of change and coping mechanisms used by the individual at various stages throughout the process of ending the addiction.

Smoking Cessation Self-Efficacy

Smoking cessation is one of the most studied of the addictive behaviours, largely because smokers are usually less defensive in answering questions about their habit than alcohol or drug users and, due to this, they can often be recruited in large numbers (DiClemente et al., 1995).

Research by Shadel and Cervone (2006) illustrates that smokers' self-efficacy assessments are strong predictors of the outcomes of their cessation efforts. The researchers evaluated whether two abstinence-related self-schemas, the 'abstainer ideal' and the 'abstainer ought-possible' selves, could regulate self-efficacy to refrain from smoking when participants were subject to "provocative smoking cues" (p. 91). The 'abstainer ideal' related to the characteristics an individual wished to have if he or she could become a non-smoker, while the "abstainer ought-possible' was based on the

characteristics the individual saw as his or her obligation to possess if the person was a nonsmoker. The results of this study indicate that self-efficacy to quit smoking in situations where high levels of craving are provoked is controlled by "cognitive knowledge structures"; that is, the self-schemas of an individual that describe the attributes he or she possesses as a smoker, and those the person would imagine to possess as a nonsmoker (p. 94). Further, the research illustrated that activating these cognitive structures produces greater levels of self-efficacy in smokers in response to situations where cravings are provoked, and that these higher levels of self-efficacy reduce cravings. Based on the results of this study, the researchers assert that knowledge of smokers' cognitive structures can assist in designing treatments directed at self-efficacy assessments to improve the outcomes of cessation attempts.

Similar research also points to self-efficacy as a factor critical to the quit-smoking process. In a study involving 214 smokers, Shiffman, Balabanis, Paty, Engberg, Gwaltney, Liu, et al. (2000) asked smokers to record day-to-day changes in self-efficacy during a period of four weeks after quitting. It was found that self-efficacy levels remained high until a smoker's first lapse, following which levels decreased and then became more varied. Findings were used to assess the effect of daily self-efficacy levels on a smoker's risk of relapsing, concluding that self-efficacy is of particularly great importance during the relapse process in predicting subsequent relapse risk.

The theoretical issues dealt with in many cessation studies focus on "efficacy as a mediator of behaviour change, the primacy of efficacy over simply measures of prior behavior, the proposed predictors of self-efficacy, and the relationship of self-efficacy to outcome expectancies and other important change constructs" (DiClemente et al., 1995,

p. 118). Given the role played by self-efficacy in the process of ending addictions, it is important to also understand the motivators and obstacles that patients explain as influencing their cessation efforts, and how levels of self-efficacy affect their ability to utilize or overcome these respective elements. An understanding of how patients themselves experience and explain nicotine addictions in relation to self-efficacy levels through narrative is currently absent in the literature on smoking cessation. As discussed by Moffat and Johnson (2001), the process of a health behaviour change such as smoking cessation can be very effectively communicated through an individual's own story of the experience of ending his or her nicotine addiction:

> An underlying assumption in narrative inquiry is that individuals construct and express meaning through storytelling, that is, how one tells a story reveals meaning. At the same time, narrative inquiry involves close examination of how the narrator presents himself or herself to the listener. Storytelling is a representation of a personal reality at a particular moment in time. In this way, the participant actively constructs who he or she is by what he or she tells, emphasizes, and how he or she emphasizes it... Narrative inquiry pays particular attention to semantics and enables a careful analysis of the language used to describe personal experiences such as nicotine addiction (Moffat and Johnson, 2001, p. 670).

As Moffat and Johnson (2001) highlight, narrative inquiry is a proven method by which an understanding of addictive behaviours can be gained. As such, an analysis of narratives given by smoking cessation patients, with a particular concentration on self-efficacy levels, will lend to both communication and smoking cessation research by examining both narrative inquiry and the quit-smoking process. Further literature on narrative inquiry will be discussed at greater length in a related section of this paper.

The Effects of Intervention on Self-Efficacy and Smoking Cessation

While personal motivation is an essential element to an individual's cessation efforts, many smokers find further assistance in intervention programs that engage people

in group programs, self-help tools, individual counselling and other treatment approaches (*Tobacco use cessation programs*, 1995).

According to Van Der Rijt and Westerik (2004), individuals who wish to quit smoking have a better chance of doing so if they undergo smoking cessation treatment. Further, the researchers cite readiness to quit as a factor in smoking cessation outcomes: "Subjects who intend to quit 'someday' will only have a vague picture of what smoking cessation means, whereas subjects who want to quit within a short period will have a more vivid picture of this process with its problems and will probably experience more dissonance" (p. 192). When smokers reach a point where they very much desire to quit but feel unable to do so, they often see a smoking cessation treatment as a necessary tool. Anxiety regarding problems associated with quitting, such as fear of withdrawal symptoms, in addition to low self-efficacy, may produce cognitive dissonance; this in turn may stimulate a smoker's intention to use a smoking cessation treatment (Van Der Rijt and Westerick, 2004).

As knowledge regarding smoking behaviour advances, intervention programs are modified to be more effective in assisting people's cessation efforts. While, in the past, concerns surrounding smoking cessation treatment programs have focussed on components such as cost, language, and location, more recent programs have extended their focus to issues such as literacy levels, cultural relevance, special needs of particular groups, and targeted recruitment strategies (*Tobacco use cessation programs*, 1995). It is through communication with patients themselves -- particularly, through narrative inquiry -- that these more qualitative issues can be successfully established in smoking cessation programs.

In-Hospital Smoking Cessation Programs

Stevens, Glasgow, Hollis, and Mount (2000) indicate that in-hospital programs represent one of the most influential smoking intervention strategies by utilizing situations with the ability to motivate smokers to quit and then offering personalized intervention programs. Similarly, Revell and Schroeder (2005) emphasize that advice to patients from health professionals can double a smoker's chances of quitting, illustrating the importance of in-hospital interventions. By taking advantage of situations in which smokers are likely to be motivated and more willing to receive advice, hospital staff are able to successfully communicate to patients what Revell and Schroeder (2005) refer to as "teachable moments" (p. 451).

Cappella, Fishbein, Hornik, Kirkland Ahern, and Sayeed (2001) emphasize that, if a patient has not formed strong intentions to change behaviour, the main determinants in this intention being formed include the patient's attitude toward changing his or her behaviour, the perceived norms involved in executing the behaviour, and the person's self-efficacy regarding the performance of the behaviour. As such, "before developing interventions to change intentions, it is important to first determine the degree to which that intention is under attitudinal, normative, or self-efficacy control in the population in question" (Cappella et al., 2001, p. 219). Because attitudes, perceived norms, and self-efficacy levels may change throughout the process of cessation, the evaluation of a patient's self-efficacy before, during, and following an intervention may be useful in evaluating the program's effectiveness.

Coleman (2004) maintains that concentrated behavioural support provided by well-trained smoking cessation therapists outside of routine clinical care is the most

effective intervention for individuals who wish to quit smoking. While withdrawal-oriented therapy focused largely on nicotine replacement programs has been viewed as an effective method of smoking cessation treatment, Hajek (1989) indicated that, especially in the area of relapse prevention, this type of program may be complemented by approaches that see the main goals of treatment as enhancing a patient's motivation to quit. This, in turn, may provide awareness regarding the patient's reasons for smoking, prompting behaviour change, ending sensitivities to smoking cues, enhancing self-efficacy, and teaching coping skills.

The Assessment of Self-Efficacy in Smoking Cessation Program Participants

By assessing self-efficacy, intervention counsellors are able to target specific competency-related perceptions, thus allowing them to predict areas of potential difficulty, and to tailor interventions to meet patients' individual needs (Maddux and Lewis, 1995). Evaluating specific self-efficacy expectancies regarding particular behaviours and goals is often more effective than only examining a person's general sense of competency, and can assist intervention counsellors in determining which beliefs and behaviours require modification in specific situations to help the patient experience success and increase situation-specific self-efficacy (Maddux and Lewis, 1995).

To facilitate a more comprehensive understanding of the shifts that occur in patients' self-efficacy levels during the course of a behaviour change, Abraham, Norman, and Connor (2000) emphasize the need to develop further "theoretically integrated models of behaviour change" (p. 360). The authors maintain that intervention programs should consider a number of factors, including "dispositional tendencies, motivational processes affecting intention formulation, volitional processes affecting action regulation,

goal hierarchies and self-regulatory strategies affecting cognition and action control" (p. 360). Further, it is essential to evaluate intervention programs with more than only randomized control trials, by implementing a psychological perspective to determine why the intervention was effective and which components of the intervention combined to create changes in cognition and behaviour (Abraham et al., 2000).

Meta-analyses by DiClemente et al. (1995) illustrate that a focus on self-efficacy during the treatment of addictive behaviours, including smoking, has proven useful for both research and clinical practices. Further, expectancies related to treatment behaviors or the probability of achieving abstinence have predicted both participation levels and drop out rates for treatment programs. End-of-treatment efficacy has also been associated with maintenance or relapse (DiClemente et al., 1995).

To ensure success, behavioural change procedures based on psychological principles must be active in providing patients with opportunities for a number of cognitive and behavioural changes, including: "learning new skills, adopting new attitudes and beliefs about self and world, and reducing emotional states that interfere with effective cognitive and behavioral responses to problems and challenges" (Maddux and Lewis, 1995, pp. 42-43). As such, intervention counsellors must ensure that patients experience cognitive adaptations, in addition to behavioural changes.

Research by Ilgen, Tiet, Finney, and Moos (2005) on the correlation between abstinence self-efficacy and substance abuse treatment outcomes highlights the importance of the relationship between self-efficacy and treatment outcomes, and the factors that may serve to reinforce this relationship. Specifically, the researchers found that the quality of the relationship between therapist and patient while undergoing

substance abuse treatment interacts with initial levels of self-efficacy to predict treatment outcomes. Thus, individuals with low self-efficacy who were part of a strong therapeutic relationship had one-year substance use outcomes comparable to those of patients who had high initial levels of self-efficacy. This research is important in indicating that the relationship between self-efficacy and outcomes is not always consistent, and may be altered based on the factors involved in the cessation process, including intervention programs.

Similarly, in a study examining control self-efficacy with inpatient subjects, Solomon and Annis (1990) found that a patient's confidence in his or her ability to abstain from drinking was heightened during treatment. In addition, the researchers found that the level of self-efficacy upon a patient's admission to a treatment program was strongly linked to the individual's daily alcohol intake three months following the treatment.

More research is needed to link patients' initial levels of readiness to quit smoking to their cessation outcomes. This connection is examined in the current study, specifically in relation to patients' involvement in the UOHI inpatient smoking cessation program. While numerous studies have examined self-efficacy in relation to smoking cessation efforts, there has been little examination of the relationship between initial readiness to quit and self-efficacy throughout the cessation process. Further, most studies have relied on quantitative measures, or have utilized methods such as daily self-reports in journals. To the author's knowledge, no research has analyzed the motivating and impeding factors involved in the smoking cessation process based on patients' initial

readiness to quit *and* through verbal accounts from patients following an inpatient intervention program.

This thesis has studied a sample of cardiac patients who underwent the University of Ottawa Heart Institute's inpatient smoking cessation program. The patients were interviewed over the phone six-to-eight months following their discharge from the hospital. These patients were sub-divided into groups based on their initial readiness to quit, which was determined upon each patient's admission to the UOHI smoking cessation program during a meeting between the patient and a nurse specialist. The narratives from their interviews shed light on how individuals attempting to quit smoking discuss their cessation efforts, specifically in light of their initial levels of readiness to quit, and draw attention to the levels of self-efficacy experienced by each individual at various stages throughout the cessation process.

Research Rationale

Research has found that an individual's confidence in his or her self-efficacy, supported by goals and both knowledge and acceptance of potential obstacles, has the ability to assist in behaviour modification. Social cognitive theory and the application of self-efficacy have been noted as particularly useful in the treatment of addictions, including eating disorders, drug and alcohol addictions, and during the smoking cessation process. Studies have shown that a person's self-efficacy levels throughout the process of ending an addiction can have a significant effect on his or her success levels, and can help to predict a patient's likelihood of relapsing.

By examining the narratives of cardiovascular patients undergoing smoking cessation counselling, the current study examines themes in narratives in relation to self-

efficacy. The study uses qualitative research in the form of patient interviews to establish how social cognitive theory explains individuals' abilities or inabilities to change their addictive behaviours. Specifically, the study uses narrative analysis to establish those factors that cardiovascular patients assert to be the motivating or impeding factors related to their smoking cessation efforts.

While there is significant research supporting the utility of self-efficacy in ending addictions, less research has been done to identify the motivating factors that smokers themselves express as having affected changes in their addictive behaviours. This research highlights factors that individuals communicate in their narratives regarding changes to self-efficacy throughout the process of smoking cessation.

The information obtained will provide researchers in the health domain with new insights regarding the factors involved in an individual's choices on the subject of smoking cessation, which, in turn, will enable adaptation of health professional training with regards to cessation counselling. As a result, this research will provide support to health domain practitioners and researchers during the implementation of new policies and both in-hospital and community service practices. Moreover, with regards to the field of communication, this research will contribute to theory development in the area of narrative analysis by exploring the ways in which individuals communicate and make sense of their own life experiences.

Chapter Three: Research Design and Methodology

This chapter will outline the research strategy used and offer a justification for the narrative analysis approach selected to investigate the central research questions. This section will also summarize the narrative analysis method employed in this study, including the criteria used to determine the use of this method, and the reasons for rejecting other research method options.

This study uses qualitative research in the form of patient interviews to establish how social cognitive theory explains individuals' abilities to change their addictive behaviours, with specific reference to the UOHI inpatient smoking cessation program. This program is specifically designed for cardiac patients who smoke. It is aimed at helping these hospitalized smokers quit smoking and remain smoke-free by determining each patient's counselling needs based on the individual's readiness to quit; that is, those ready and motivated to quit smoking, and those not ready, or resistant. The program then provides stop-smoking counselling and medication during the patient's hospitalization, links the patient to quit-smoking resources within his or her community, and provides follow-up after the patient is discharged from the hospital (Reid, R., Pipe, A., & Quinlan, B., 2006). As such, the UOHI smoking cessation program provides an ideal environment on which to frame the experiences of cardiovascular patients who are participating in smoking cessation intervention counselling.

Ethics

Ethics approval was provided for this study by the University of Ottawa Heart Institute Human Research Ethics Board. Expedited approval was then also granted by the University of Ottawa Social Sciences and Humanities Research Ethics Board. Later

modifications to the study's data gathering techniques were also approved by both Research Ethics Boards. Ethics approvals can be found in Appendix B.

Data Gathering

This study has been conducted through a narrative analysis of interviews completed with a sample of cardiovascular patients who were admitted to the UOHI inpatient smoking cessation program six-to-eight months prior to the time of taking part in the interview. The patients represent individuals from four distinct patient populations:

- those who entered the UOHI inpatient smoking cessation program eager to quit smoking and eventually succeeded in doing so (Motivated Successes);
- those originally eager to quit who ultimately failed to do so (Motivated Non-Successes);
- those initially resistant to quitting who eventually succeeded in cessation (Resistant Successes) and;
- those originally resistant who ultimately failed to quit (Resistant Non-Successes).

When completing a patient information sheet upon admission to the UOHI inpatient smoking cessation program, patients identified their readiness to quit as one of the following:

- I have quit
- I am not planning to quit in the next six months
- I would like to quit in the next six months
- I am planning to quit in the next 30 days
- I would like to quit during this hospitalization

For the purpose of this project, the four sub-groups were categorized based on the participants' initial levels of readiness to quit. Only those who stated that they had already quit or that they were ready to quit during their current hospitalization were

deemed "motivated," while those who stated that they were not planning to quit, that they were planning to quit sometime during the next 30 days, or that they were planning to quit sometime during the following six months, were considered "resistant."

With regards to determining whether a patient was successful in quitting, this study utilized UOHI smoking cessation program guidelines, which define smoking cessation as at least seven consecutive smoke-free days. As such, in order to be included in a "successful" group, the patient must have been smoke-free for seven consecutive days prior to participating in the interview. A more detailed breakdown of the way in which the subgroups were categorized is outlined in Table 1.

Interviews with each patient were conducted via telephone; verbal consent from each patient was provided and recorded. The UOHI is a tertiary care regional referral centre for the Champlain Local Health Integration Network (LIHN). At least half of the patients who are admitted to the UOHI live more than an hour from its main campus in Ottawa's core. As such, telephone interviews were the most reasonable technique available with which to interview the greatest number of participants.

While telephone interviews are often used in studies based on quantitative data and, therefore, may be considered a quantitative rather than qualitative technique, the use of the telephone in this particular study did not prevent the interviews from being otherwise comparable to in-person, in-depth interviews. As stated by Riessman (1993), "to encourage those we study to attend to and tell about important moments in their lives, it is necessary to provide a facilitating context in the research interview, which implicates the interview schedules we develop" (p. 54). The study's Interview Guide (Appendix A) and the participants' responses, examined in Chapter Four, respectively

Table 1
Explanation of Patient Subgroup Categorization

Motivated Successes (MS)	• All patients who confirmed upon admission to the program that they "would like to quit during this hospitalization," and who had been smoke-free for at least the previous seven days prior to the interview, were categorized as "Motivated Successes."
Motivated Non-Successes (MN)	• All patients who confirmed upon admission to the program that they "would like to quit during this hospitalization," and who had not been smoke-free for at least the previous seven days prior to the interview, were categorized as "Motivated Non-Successes."
Resistant Successes (RS)	• All patients who stated upon admission that they (a) were not planning to quit in the next six months, (b) would like to quit in the next six months, or (c) were planning to quit in the next 30 days, and who had been smoke-free for at least the previous seven days prior to the interview, were categorized as "Resistant Successes."
Resistant Non-Successes (RN)	• All patients who confirmed upon admission that they (a) were not planning to quit in the next six months, (b) would like to quit in the next six months, (c) were planning to quit in the next 30 days, and who had not been smoke-free for at least the previous seven days prior to the interview, were categorized as "Resistant Non-Successes."

highlight the open-ended questions employed by the researcher and the subsequent rich and revealing responses provided by the patients. Further, probing questions suggested by Riessman (1993), including "Can you tell me more about that," and "What was the experience like for you," were introduced throughout each interview to encourage the expansion of participants' responses and to gain further insight into the meanings of their communicated stories (p. 55). As such, telephone interviews were an effective qualitative technique used to gather meaningful and comprehensive data for this study.

Sample

The sample of patients interviewed was selected from a list of patients involved in the UOHI inpatient smoking cessation program in September, October, and November 2006 – approximately six-to-eight months prior to the time the interviews took place. As noted by both Cohler (1982) and Gergen (1988), individuals must link events to larger life stories and organize these memories internally in order to find meaning within their experiences. Further, according to the Transtheoretical Model TTM, the *action* phase of a health behaviour change can last for three-to-six months, which is then followed by a stage of *maintenance* in which the individual must learn to sustain the behaviour change that has been achieved (DiClemente et al., 1995). As such, a six-to-eight month timeframe between the patients' release from the hospital and their participation in the interviews was given to allow them time to absorb the events they had experienced in the process of attempting to quit smoking and to tie these events to their life story, both pre- and post-hospitalization. This timeframe also allowed patients a period in which to implement the stages of *action* and *maintenance* in their smoking cessation attempts.

The sample is based on a process of *stratified sampling*; that is, one which allows the researcher to compare certain subgroups within a population (Rubin, Rubin, and Piele, 2005). The sample includes individuals from each subgroup discussed above. The rationale for dividing the sample into four subgroups was based on the combination of social cognitive theory as a theoretical framework and the UOHI smoking cessation program as an environment in which to conduct the study. That is, while social cognitive theory is structured on an individual's beliefs and perceptions (regarding self-efficacy, goals and expectations, and obstacles), the UOHI program focuses on determining each

patient's counselling needs based on the individual's readiness to quit, which is also structured by perceived self-efficacy and the identification of potential impediments. As such, examining the narratives of both resistant and willing individuals, in addition to those of both successful and non-successful quitters, was ideal in terms of the theoretical context being studied and the environment being examined.

While the study's initial goal was to analyze the narratives of five patients from each subgroup, obstacles such as some patients' unwillingness and lack of availability resulted in fewer participants than originally anticipated. As such, rather than a total of 20, a total of 13 patients were interviewed. The number of patients interviewed from each subgroup is outlined in Table 2. Interviews, all completed by telephone, lasted for a duration of 20 to 60 minutes. The sample resulted in three female and 10 male participants. Patients' ages ranged from 47 to 77, with an average age of 60. The number of years the patients had smoked ranged from 16 to 62, with an average number of 41 years.

Table 2
Total Number of Participants per Sub-group

	Motivated to quit upon entering UOHI program	**Resistant to quitting upon entering UOHI program**
Successful in quitting 6 to 8 months following UOHI program	4 patients (MS)	2 patients (RS)
Unsuccessful in quitting 6 to 8 months following UOHI program	3 patients (MN)	4 patients (RN)

As this is a qualitative study of cardiovascular patients' narratives, the focus of the "results" are on narrative patterns, rather than quantitative figures. As such,

probability, a term which Keyton (2006) refers to as identifying how much error a researcher finds acceptable in a particular quantitative study, is less important than the analysis of patterns that developed from the interviews. In addition, as discussed by Rubin et al. (2005), sampling can often be more effective than, for example, a census of an entire population, because it allows for a more "in-depth analysis of content or artifacts" (p. 209).

Raggatt (2006) points out that the integration of an individual's life stories into one narrative account is important, as people "clearly derive happiness and a sense of purpose from the experience of integrating past, present, and future into synergistic wholes" (p. 16). However, Raggatt (2006) also maintains that researchers must allow for multiplicity in the methods by which those being interviewed choose to construct their narratives. In his *personality web protocol*, the author suggests that accounts of various stories from numerous periods in an individual's life, including both optimistic and pessimistic voices, result in the creation of a more thorough narrative.

Keyton (2006) asserts that there is rarely a definitive sample size that should be used for a particular study. Additionally, Patton (1980) pointed out that it is the quality and depth of the data obtained that should derive a sample size. As such, sampling for this study aimed to achieve a necessary depth of data in order to analyze the narrative patterns of 13 cardiac patients. This size is in accordance with that found in qualitative methodology literature, such as Glaser and Strauss (1967) and Charmaz (2006), who argue that researchers should sample until the categories of study are saturated -- that is, researched to a point where information begins to overlap -- and that this supersedes sample size, which may be quite small.

Qualitative Measures

Narrative Analysis Methodology

Research on behaviour changes often focuses closely on quantitative data, concentrating less on a qualitative analysis of patients' own stories regarding their successes and failures (Kibel, 1999). As such, rather than focusing on quantitative data resulting from cessation statistics, this study uses narrative analysis based on patient interviews to determine how social cognitive theory explains individuals' abilities to change their addictive behaviours.

Measurements of Success. Self-report measures -- including interviews, questionnaires, journals and diaries, and response scales -- are among the most common types of instruments used in the measurement and evaluation of health programs (Di lorio, 2005). Eissenberg (2004) writes that frequently-used methods of dependence measurement also include structured interviews, questionnaires and dependence scales.

However, as Kibel (1999) indicates, programs that focus on behaviour change in clients "typically report body counts of those it has served, results from client satisfaction surveys, and an assortment of numeric measures of client or community outcomes, while engaging in a qualitatively different enterprise with its clients than these quantitative indicators reveal" (p. 3). This is to say that research focussing on behaviour change often concentrates very narrowly on quantitative data, rather than looking more deeply at qualitative data or narrative analysis of patients' own views of their successes and failures. As such, the current study uses narrative analysis based on patient interviews to better understand how social cognitive theory explains individuals' abilities to change their addictive behaviours.

Memory. The close examination of an individual's dialogue provides assistance in understanding the ways in which people make sense of their memories in order to form a coherent story. Cohler (1982) noted that, while earlier research on narrative inquiry illustrated concern regarding the storage of memories and maintenance of consistency in narrative experiences, more recent research has understood memory as that which represents "internal organizations of past experiences functioning in a unified and active manner" (p. 211). Supporting this argument, Gergen (1988) maintained that events lose meaning if not tied to a larger story and, as such, narrative structures attempt to build a contextual analysis of data that is gathered through inquiry to become "everyday explanations of human action" (p. 95). More recently, Lieblich, Tuval-Mashiach, and Zilber (1998) explain that people are storytellers by nature, and that stories provide consistency to their experiences and play a key role in communication with others.

Sense-making. Beebe, Beebe and Redmond (2004) define human communication as "the process of making sense out of the world and sharing that sense with others" (p. 6). In their discussion of communication campaigns, Dervin and Frenette (2001) insist that these programs are "doomed mostly to failure unless they focus on how audiences interpret their worlds and live and struggle in the complexes of social networks and everyday experiences that bind them" (p. 72). As such, *sense-making methodology* insists that researchers pay close attention to how people are making sense of events in the context of their own lives.

Significant to narrative analysis, sense-making is a tool utilized in this study to focus on the ways in which cardiac patients make sense of events -- particularly those events surrounding their smoking cessation efforts -- in the context of their own lives.

The researcher must encourage the patient to describe his or her world in the context of the patient's own meanings and understandings in order to gain knowledge of the individual's life experiences (Dervin and Frenette, 2001). Using sense-making's verb analysis tool, the focus of each interview is transferred from what Dervin and Frenette (2001) refer to as "nouns of interest," to verbs that are more permissive of rich and diverse dialogue (p. 72). By using sense-making as a central tool within the narrative analysis methodology, a greater understanding is gained of the meaning that individuals have made as they have progressed through life experiences; specifically, those experiences involved in the process of quitting smoking.

Dervin and Frenette (2001) maintain that, in order to gain knowledge of an individual's life experiences, the researcher must encourage the person to describe his or her world in the context of the person's own meanings and understandings. This is accomplished by transferring the researcher's attention from "nouns of interest," such as the goals and evidence of the study, to "verbs that permit a dialogic interface to be established" (Dervin and Frenette, 2001, p. 72). The useful example provided by Dervin and Frenette (2001) relates to obesity:

> In a nouning approach, obesity might be defined as a physical condition that must be alleviated to prevent ill health. In a verbing approach we would learn how people make sense of obesity in their experiential contexts: One group may tell of its fat ancestors who lived long lives, another may tell of its anger at a society that promotes unhealthy eating habits but has made obesity one of its worst stigmas, and another may tell of lifelong struggles with physicians who have demanded that as patients they submit themselves to a succession of new diet regimes, each one presumably more efficacious than its predecessor (pp. 72-73).

Thus, sense-making methodology's verb analysis is a central tool used in understanding the meaning that individuals have made as they have progressed through life experiences.

Sense-making can be used effectively to examine a variety of change initiatives. For example, a study by Bartunek, Rousseau, Rudolph, and DePalma (2006) utilized sense-making methodology to explore nurses' interpretations of an organizational change within the hospital in which they worked. The study examined the degree to which the nurses' participation in the change affected the meanings they made of the change, their feelings regarding it, and their change-related costs and benefits. Using a sense-making approach involving discourse analysis, researchers were able to examine the meanings, feelings, and outcomes generated by change. While this model is far-removed from the study of interviews with patients involved in a smoking cessation intervention, it provides a clear example of the way in which sense-making methodology may be used in any discourse analysis to create a more holistic understanding of the effects of change on the lives of individuals experiencing that change.

People often use narrative to make sense of life events and to reconstruct past experiences, recontextualizing past events into new perspectives (Günthner, 2005). However, as Lieblich et al. (1998) assert: "The particular life story is one (or more) instance of the polyphonic versions of the possible constructions or presentations of people's selves and lives, which they use according to specific momentary influences" (p. 8). As such, it is important for researchers to realize that, although the story is read as a fixed account, it actually reflects an inner identity that is constantly changing. When conducting research based on narrative interviews, it is essential to take into account that the life story is modified throughout time and that when a specific story is recorded it is purely a single transcript of a continuously shifting identity. Further, each story is influenced by the context in which it is told, including the nature of the audience, the goal

of the discussion, and the rapport between the interviewer and the narrator (Lieblich et al., 1998).

Narrative Analysis and the Revelation of Meaning

Research by Moffat and Johnson (2001) reveals that a primary notion in narrative inquiry is that how individuals tell stories reveals meaning. In a study using narrative inquiry to explore the meaning of nicotine addiction among teenage girls, Moffat and Johnson (2001) found that three specific narrative patterns emerged: invincibility, giving in, and unanticipated addiction. The researchers noted the significance in paying attention to how study participants talked about smoking and nicotine addiction, as terms such as "quitting smoking" and "stopping smoking" had multiple meanings and were used by participants in very different ways. "These semantic distinctions point to the importance of listening carefully to the choice of words to better understand the meaning ascribed to those words as (participants) speak about nicotine addiction" (Moffat and Johnson, 2001, p. 678). Further findings of the study reveal that storytelling is an effective representation of an individual's reality at a particular moment in time and, through storytelling, study participants actively constructed who they were by the stories they told, the components of the stories they emphasized, and the way they emphasized them.

In another study utilizing narrative analysis, Parry, Fowkes, and Thomson (2001) examined accounts of quitting smoking among older ex-smokers with smoking-related diseases. Seventy respondents were recruited to participate in this qualitative study of influences on patterns of smoking behaviour, aiming to understand patients' explanations of smoking in the context of their own life circumstances. The study explored how the sample placed themselves, and how they were positioned by the language they used in

their accounts of quitting. The article drew on discourse analysis to understand how health-related behaviour change is created through language. By participating in discourse regarding their cessation attempts, patients gained a sense of coherence through the organization of a sequence of events, which explained the relationship between these events and other circumstances in their lives and positioned their smoking cessation within a particular time in each patient's life. While effective in demonstrating the usefulness of narrative analysis in the process of understanding smoking behaviour, this study by Parry et al. (2001) differs from the current study in that it did not take into account patients' initial levels of readiness to quit smoking and it did not place a significant focus on the theoretical framework of social cognitive theory or the role of self-efficacy in the smoking cessation process.

The current study will use patient narrative analysis to examine the perceptions of self-efficacy that play a role in smoking cessation efforts. The study's central research questions are: What are motivating factors in the smoking cessation efforts of cardiovascular patients? What are impeding factors in the smoking cessation efforts of cardiovascular patients? How are these factors revealed through narrative analysis of patients' own communication regarding their smoking cessation experiences?

Interview structure

Glaser and Strauss (1967) argued that much writing regarding sociological method is related to the meticulous testing of theory and the acquisition of facts. In order to address this, these authors emphasized the potential benefits of using a grounded theory-based approach; that is, the generation of social research theory from data. To this end, qualitative research in the form of open-ended interviews and narrative analysis can

provide new insights regarding individuals' experiences and their own levels of personal agency during behaviour change.

Regarding the structure of interviews that provide the data for narrative analysis, Mishler (1986) argued that viewing personal stories as serious data for use in evaluations forces researchers to more closely examine the aims of their investigations. Furthermore, Mishler pointed out that, instead of limiting their interview question responses to those they feel are relevant to the topic, viewing storytelling as a natural means of communication allows both interviewers and interviewees increased flexibility, and also results in broader implications for research.

Qualitative evaluation was used in this study to gain an understanding of participants' perceptions of the ways in which self-efficacy guided their decisions related to smoking cessation. Specifically, narratives from semi-structured interviews using open-ended questions related to the experiences of each individual during their cessation efforts were gained from a specific sample of the UOHI inpatient smoking cessation program population. As discussed by Rose (1982), many interviews fall between the two extremes of "standardized" -- an interview in which both the questions and the range of answers are prearranged -- and "unstructured," where neither the questions nor the form of the answers are predetermined (p. 306). This "semi-structured" method was chosen to ensure that, while some questions posed during the interviews were predetermined in order to allow for a focal point on which to continually return, the fluidity of the narratives sought was not disturbed or hindered by a rigid interview structure.

As discussed by Keyton (2006), biographical questions help the researcher understand the "contextual nature" of the interface they are studying, while also creating

a rapport between the researcher and the respondent and providing background and clues for deciphering responses central to the interview topic (p. 273). Further to this, Keyton (2006) emphasizes that open-ended questions asked using plain language and common terminology allow the respondent to communicate his or her own story, not suggesting the expectation of any particular answer and allowing for fluidity within the narrative.

Telephone interviews were audio-taped and transcribed. Audio-taping began only after verbal consent was gained from each participant to permit the interview to be recorded, as in the manner of in-person in-depth interviews. The researcher reading the Patient Information Form to each participant was also then audio-taped, and each patient's consent to participate in the study was recorded.

In reading the Patient Information Form to each participant, individuals were assured that their privacy and anonymity would not be put at risk by participating in the study, as neither their names nor their initials would be used to identify them in any publications. Further, the form explained that, as part of the research protocol, only the Principal Investigator, researcher and clinical research staff at the UOHI would review the patients' health records. The patients were also made aware that this study had received expedited ethical clearance from Research Ethics Boards at both the University of Ottawa and the UOHI. Additionally, the form explained that participation in the study was entirely voluntary; participants could refuse to answer any specific questions or withdraw at any time. Finally, patients were assured that neither their legal rights nor their present or future care at the UOHI would be affected by participating in this study.

Interview transcriptions were analyzed by the researcher using a manual thematic assessment coding technique to classify and arrange the qualitative data and gain an

understanding of the patterns and themes that emerged. These patterns were analyzed to explore the narratives of smokers in the context of social cognitive theory, and to examine the relationship between self-efficacy and smoking cessation successes and failures. An initial examination of patient interview transcripts revealed frequent discourse of several themes contributing to or hindering smoking cessation success, including social factors, hospitalization, changes in health, and attitudinal factors. As such, a coding method was used in the analysis of interview transcripts to examine the frequency at which each theme was discussed by each sub-group to assist in determining the most prominent factors that patients themselves said motivated or created obstacles in their attempts to quit smoking.

Methodology Rationale

As a thesis written for the field of communication, this research justified the use of social cognitive theory as the main conceptual framework, and narrative inquiry and analysis as the central methodological tools. While quantitative data is useful in helping to determine the statistical results of addiction intervention programs such as the UOHI inpatient smoking cessation program, patient narratives are a more appropriate tool with which to determine the motivating and impeding factors that patients themselves say affect their cessation efforts.

As discussed earlier, Kibel (1999) emphasizes that far more attention has been paid to statistical analysis and other forms of quantitative data than to the significant meaning behind patients' own understandings and communication of their success and failures. As such, narrative analysis was chosen as a research tool in order to place greater emphasis on the importance of understanding the way in which individuals

communicate their stories of health behaviour change, and the implications of these meanings to the fields of communication and health.

As discussed in the previous chapter, while a substantial amount of research exists to support the utility of self-efficacy in ending addictions, less research has been done to identify the factors that smokers themselves say affected changes in their addictive behaviours. This research highlights factors that individuals communicate in their narratives regarding changes in self-efficacy throughout the process of smoking cessation. The use of narrative inquiry and analysis, and a focus on sense-making, assist in the understanding of how patients create meaning around, and then communicate, their experiences with smoking cessation.

Chapter Four: Results and Analysis

This chapter will review the study's key findings and place them in the context of both the central research questions and the literature examined in Chapter Two. It will include sub-sections to first thoroughly describe the themes and patterns of language revealed through the interviews, and to then discuss and analyze the qualitative results of patient narratives within each specific sub-group.

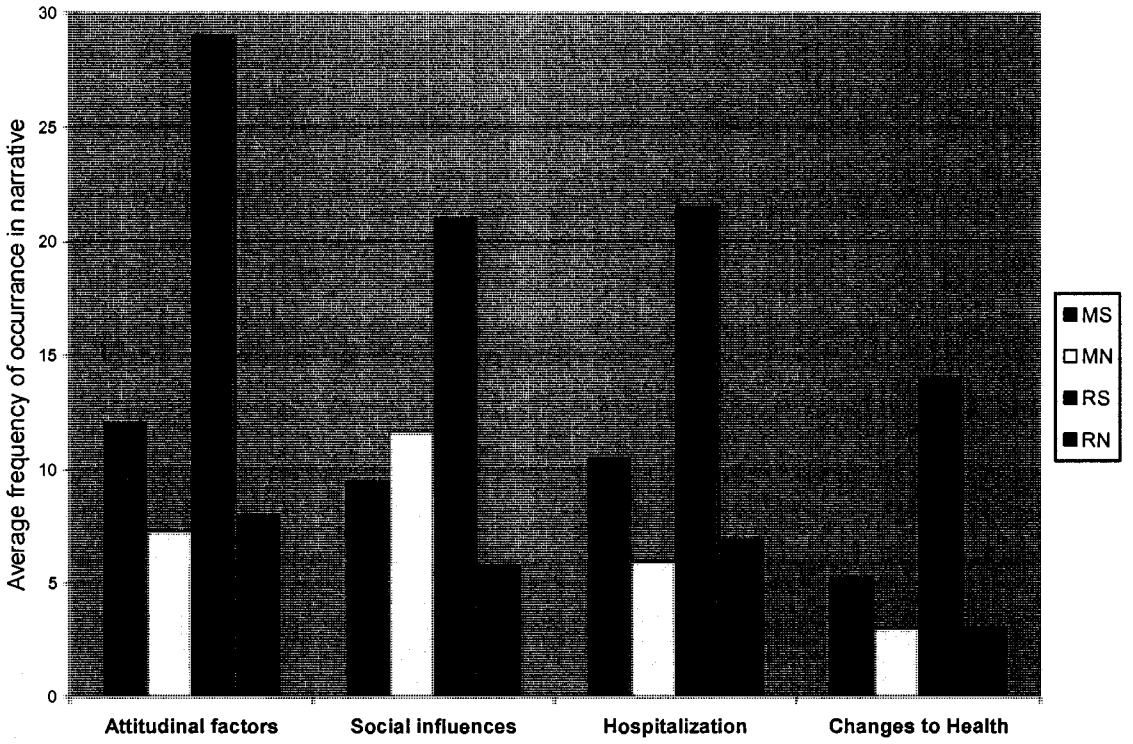
Themes and Patterns of Language

The qualitative data was analyzed to uncover patterns and themes in the narrative accounts of the study's participants. An initial review highlighted several dominant themes in the patients' discourses as they discussed the factors -- both positive and negative -- that affected their smoking cessation attempts. These themes were then classified using headings and linked to qualifying characteristics that assisted in describing each theme.

The theme headings include: *Attitudinal factors*, a narrative which, depending on the sub-group to which the patient belonged, centred on a number of attitudes affecting health behaviour, such as a sense of empowerment or weakness, feelings of success or failure, a sense of pride or shame, an increase or decline in confidence, and the denial or acceptance of addiction; *social influences*, such as friends, spouses and other family members, and situational stress that participants cited as leading to or distracting them from smoking; *hospitalization*, which involved discussion of the participants' experiences with the UOHI inpatient smoking cessation program, its staff, and other staff within the Ottawa Hospital; and *changes in health*, in which participants discussed how either positive or negative changes to their health affected their abilities to quit smoking.

An initial review of the interviews revealed a number of key findings from the four patient sub-groups. A comparative analysis of these findings is outlined in the following subsections, and in Figure 1. A pattern also developed in the lengths of the interviews. Discussions with patients who were successful in smoking cessation tended to extend beyond the anticipated 30 to 40 minute interview, and included richer dialogue with very thorough responses to questions. However, the narratives of participants who had not successfully quit smoking were much more succinct. These dialogues included shorter, less comprehensive responses to questions, and revealed a certain level of unwillingness by participants to provide detailed narrative accounts of their smoking cessation experiences, while also tending to last only 20 to 30 minutes.

Figure 1
Comparative Analysis of Narrative Themes between Patient Sub-groups



Attitudinal Factors

The theme titled *attitudinal factors* encompassed various beliefs, opinions and expectancies by participants that influenced their abilities to quit smoking.

The narratives of the Resistant Success (RS) group included greater mention of attitudinal factors than any other theme, frequently using terms such as "mindset" and "willpower" when discussing their smoking cessation processes:

> *RS001*: When I decide something, that's it, you know? And I will decide it, and I will quit just for principle. If you can't even trust your own mind, you know, where are you? Then you have got no willpower at all to do anything.

Similarly, RS002 stated that smoking cessation is "a mindset more than a goal" for her, adding: "I don't even think about it… It's just, you know. I kind of – even the word 'cigarette,' I just… I am not going there."

Motivated Non-Successes (MN) used similar language in describing their attitudes towards quitting smoking. While none were smoke-free during the time of their interviews, all stated that, once they possessed a particular "mindset" or level of readiness, they would have the self-efficacy to quit. MN001, for example, stated: "For me, it is really a mindset. I have to get my mind into a certain gear, into a certain mode." Similarly, MN002 continually referred to himself as a "stubborn" individual and asserted: "I'm that type of person. If there's something I want to do, I do it."

The dialogues of Motivated Successful (MS) patients also included frequent references to attitudinal factors, at a similar rate to social influences and hospitalization. However, in terms of attitudes, these patients' narratives were generally more focussed on feelings of pride in their success. MS001, for example, exhibited feelings of pride and satisfaction when explaining that his son and daughter-in-law had recently quit smoking,

stating: "I think I was probably a good model for them." Similarly, MS002 indicated that he felt he was the "inspiration" for his wife to quit smoking. MS003 explained that, when discussing his experience with smoking cessation, he feels a great sense of satisfaction:

> *MS003*: You are sort of proud because you have quit… So you are sort of proud of yourself, and so you sort of brag about it… and it raises your self-esteem, as far as quitting smoking.

MS patients also discussed feelings of losing and gaining "control" during pre- and post-cessation periods, respectively. This is discussed further in a following section that examines MS patients' narratives specifically.

The narratives of Resistant Non-Success (RN) patients illustrated significantly different attitudinal factors than other sub-groups with regards to smoking cessation. While the other non-successful group -- the MNs -- frequently used words such as "mindset" and "willpower," and never discounted the idea that they may become smoke-free at some point in the future, RN patients' narratives were far more negative in tone, consistently using very defeatist language such as "I can't," and "I don't think I can," and "I wasn't interested (in quitting)." Further, these patients had a greater propensity to place blame on external parties, such as spouses and health professionals, for their low smoking cessation self-efficacy, lessening their own responsibility for their health behaviours.

Social Influences

Social influences, as a theme within this study, include people and circumstances that motivated or created obstacles for patients throughout their smoking cessation efforts. These included friends, spouses and other family members, and situational stress that participants said encouraged or hindered their attempts to end their nicotine addictions. Whether discussed as positive or negative influences, social factors were

mentioned frequently in the narratives of all patients, in comparison to mentions of other themes, and particularly in the narratives of MN patients, who discussed social influences more than any other theme.

MN patients were in agreement that situational stress caused by factors such as finances, work and family were significant obstacles in their cessation efforts because they associated smoking with a sense of calm and relaxation. MN003, for example, stated: "Maybe it is something in my mind, but I do; I find it calms me... It takes you out of the craziness, into your own little world for five minutes. And when you've got five kids, five minutes is heaven." Similarly, MN001 stated that she used smoking "as a crutch for the trauma" after undergoing brain surgery. Meanwhile, MN002 attributed his inability to quit smoking to the influence of his spouse, who is a smoker, stating that, although they have tried to quit on several occasions, "she keeps on smoking, so I keep on smoking."

While MN patients discussed social influences largely in terms of situational stress, MS participants discussed the motivation from family influences and the obstacles created by social situations as motivators and impediments to smoking cessation, respectively. MS001, for example, recalled that he began smoking as a teenager "because of peer pressure," and, when trying to quit, found social situations challenging:

> *MS001*: Like after a big, good meal and we are sitting at the dining room table with friends or something I will say 'Boy, wouldn't a cigarette go good now?

However, the participant said his smoking cessation was motivated by the fact that his wife was also determined to quit, and that they ended their addictions together. Similarly, MS002 stated that he began smoking at a young age because of "peer pressure," but found motivation in his desire to live a healthy life in order to provide for his wife and

children, which enabled him to quit smoking following his discharge from the hospital. Further, MS004 stated that he was already somewhat motivated to quit when he entered the smoking cessation program because family and friends had been asking him to quit for many years:

> *MS004*: My kids for one, and my wife, I guess, a few of the neighbours. Just about everybody I know that doesn't smoke didn't want me to smoke either.

The narratives of RS patients revealed similar elements to both the MN and MS groups when discussing the factors that motivated or impeded their cessations efforts. RS001 explained that he occasionally finds it difficult to be without cigarettes in social situations, such as motorcycling with friends, because smoking is a part of their "tradition." He also stated that the need to deal with an "emergency" or "tragedy" may influence a relapse in his addiction, because he finds smoking calming. Meanwhile, RS002's narrative revealed that she quit smoking briefly 30 years ago because it was not acceptable in her social circle at the time. However, she also echoed the narratives of other patients in stating: "Everybody handles stress different ways. I think smokers, that's their way. And it calms you down."

RN patients spoke of social influences considerably less often than other sub-groups. However, when they did mention social factors in the context of smoking, the linking of feelings of boredom to the habit of smoking was common. RN001, for example, stated that when he was working his smoking lessened because his mind was preoccupied, but being unable to work due to a disability lead to an increase in his smoking:

> *RN001*: If I was busy or if I work or... I don't think about it so much and, you know, when you're working or you're busy, you don't think about smoking as much.

Similarly, RN002 stated that, when he was working he did not smoke at all during the day, because being busy kept his mind off of his habit. However, in his retirement, he smokes approximately "half-a-pack per day." Also, RN003 explained that he was able to reduce his cigarette usage significantly when he was employed, asserting: "I didn't have the same urge to smoke when I was working."

Hospitalization

Both the RS and MS groups discussed hospitalization at a comparable rate to social influences as factors that motivated or hindered their smoking cessation success. Both groups expressed great satisfaction with the support they received from the UOHI smoking cessation program staff and from other doctors and nurses within the Ottawa Hospital during their hospitalization.

In particular, a pattern developed as patients from both of these groups discussed feeling indebted to smoking cessation program staff for assisting them in the cessation process. RS001, for example, stated: "I thought, when people can do that, do stuff like that for you, and wish you well and support you, you had better do something about it too, and help yourself." Similarly, MS004's narrative suggested that he felt he "owed" it to the program staff to attempt to quit smoking, saying: "I figure if they are going to go through all that trouble to help me, I might as well go help myself a bit." Further, MS001 asserted that if the staff could "take the time out of their life" to help him, he felt they "deserved" his commitment to smoking cessation in return.

A key finding in the analysis of each participant's narrative with regards to their hospitalization and, specifically, their experience with the smoking cessation program, was the association between the amount of time and personal attention patients claimed

to have received from program staff, and the result of their smoking cessation attempt. Patients in the MS and RS groups used more positive language when discussing the smoking cessation program, and described it as a "personal" experience from which they gained useful information that assisted them in ending their addictions. However, patients in the MN and RN groups used less positive language when discussing the program, recalled fewer details of their experiences with the staff, and/or claimed that the program had little effect on their smoking cessation self-efficacy.

MS002, for example, in describing one of numerous counselling sessions with a smoking cessation program nurse specialist, discussed how the information he was given was specific to his own health situation, rather than being provided with only generic smoking cessation advice:

> *MS002*: It was me personally he was talking to. I mean, I am sure there were other people that he did that to. But, to me, it was catered to me. They looked at me and this is what they found for me and this is what they did. They catered to me; this is what you should do and that was great. It really gave me the strength to do it.

Similarly, patient RS001 emphasized the importance of feeling as though he was not being judged as a smoker. Although he indicated that he was initially resistant to accepting their advice, the patient's narrative suggested that the information he was provided and the attention paid to him by the program staff was vital to his smoking cessation self-efficacy:

> *RS001*: The doctors did wonderful things, and they were pretty good with me, and I thought they would be like, 'What are you? Stupid?' You know what I mean? Somebody is trying to help you, and it is like laughing at them. Why would they work that hard to help you and you are not helping yourself?

However, while the MS and RS groups exhibited satisfaction with their experiences in the smoking cessation program, MN and RN narratives revealed

somewhat different findings. MN001, for example, claimed that she received no counselling from the smoking cessation program after her surgery, adding that a better understanding of how post-surgery trauma may lead to an addiction relapse might have been useful to her.

> *MN001*: It would have opened my eyes, and I would have been aware. So that when I did come home and I was traumatized, maybe I would not have picked that cigarette up. This is all new to me, you know? That is why it hit me so hard.

When she was contacted by a program representative following his surgery, MN001 stated that much of the information provided was not relevant, because it pertained to people who had not yet quit smoking and, at the time, the patient was smoke-free. However, she did indicate that elements of the conversation were useful, as she was made aware of support programs available for cardiac patients trying to quit smoking.

Similarly, while patient MN003 said she found the smoking cessation program "very helpful," her language also indicated that a more personalized experience including information related specifically to her own health challenges would have further enhanced her smoking cessation self-efficacy. The patient stated that she was "excited" by information regarding a new nicotine replacement therapy that might assist her cessation attempt, and advice on the correct dosage of the nicotine patch for someone with her particular heath history, but claimed that the remaining information was "generic."

While MN patients indicated that a more personalized experience with the smoking cessation program would have assisted in their smoking cessation self-efficacy, language throughout the narratives of RN patients was divided: RN001 and RN002 suggested that, while they were very resistant to accepting support from the program

during their hospitalization, they are now at a stage in which they would be more willing to accept help. Meanwhile, RN003 and RN004 were both adamant that only their own desire to quit could motivate their smoking cessation, and that advice from the smoking cessation program had not been and could not be useful. For example, RN001 stated that during his hospitalization the information provided by the program "didn't affect (him) whatsoever." However, after returning home he "settled down" and was able to re-read the information and think more seriously about the importance of quitting smoking. Further, RN002 asserted that, although he was not interested in reading the literature given to him upon his discharge from the hospital, he would now be interested in speaking to a program counsellor to discuss smoking cessation methods, because he is increasingly aware of the role of nicotine in his deteriorating health. Meanwhile, RN003 simply stated that the literature had "no effect at all" on his desire to quit smoking, and RN004 revealed the following:

> *RN004*: I read their literature. They gave me some pamphlets and some little booklets and I read it all. But I knew it all…I have spoken, as I said, to lots of people, about my smoking, and long before I had the procedures done, and I know the risks, and I know the problems associated with it. And I'm willing to accept them for now.

The patient indicated that he did not require advice from the smoking cessation program because he was aware of the risks of smoking; however, this and other areas of his narrative suggest that RN004 holds many misconceptions regarding the role of the program; that is, while RN004 perceives that the program provides only information on the risks of smoking, the program in fact focuses on teaching patients the benefits of smoking cessation, and the methods that may be used to end a nicotine addiction.

Changes in Health

The narrative theme *changes in health*, in which study participants discussed how either positive or negative changes to their health affected their abilities to quit smoking, appeared less frequently than other themes in the narratives of all sub-groups. Nonetheless, discourse revolving around this theme provided significant insight into the factors motivating or creating obstacles in patients' efforts to quit smoking.

More than any other sub-group, MS patients credited their health problems as one of their biggest motivations to quit smoking, despite the fact that all participants in the program had experienced similar health problems. Each MS patient had suffered a heart attack prior to entering the smoking cessation program. When discussing their cardiac events, patients used language such as "That is when I took it to heart" (MS001), "It was a really good awakening" (MS002), and "It scared the living daylights out of me" (MS003).

RS patients used similar language, indicating that their heart problems contributed to their smoking cessation self-efficacy. RS001, for example, stated: "I wanted to quit a long time ago, but I didn't have – I guess I didn't have enough incentive… But the operation was enough. It was a huge incentive." Similarly, when asked what motivated her to quit smoking following her hospitalization, RS002 stated: "At that point, very seriously, the heart was a biggie." In delivering their accounts in this way, MS and RS patients positioned their cardiac events as turning points in the narratives of their smoking cessation experiences. Interestingly, although the groups differed in their initial readiness to quit smoking, both groups were ultimately successful.

Conversely, MN patients tended to suggest that, although they were aware that their health problems were related to smoking, it had not yet driven them to end their problematic behaviour. MN002, for example, explained: "My health is not that great and it's interfering with my heart. So if I quit smoking, my veins might open up and help out a little bit." Further, MN001 revealed that she had quit smoking several weeks prior to entering the smoking cessation program, but then relapsed after her discharge, despite the fact that she "knew it wasn't healthy," and was aware that smoking would worsen her heart condition.

Of the four sub-groups, RN patients mentioned changes in health the least as a factor that influenced their smoking behaviour. When they did mention their health conditions, RN patients said they believed ceasing their habit would be more harmful than beneficial to their health. RN001, for example, stated he felt that he was "getting better" after reducing his daily cigarette usage and, therefore, believed his improved health conditions warranted an increase in his smoking. Also, RN003 said he believed ending his addiction would be harmful to his health because, after smoking for so many years, the lack of nicotine would be a "shock to (his) system." The narratives of RN patients exhibited obvious misconceptions regarding the damaging results of nicotine addictions. Notably, this was also the group whose narratives indicated most clearly that they were resistant to receiving support and advice from the smoking cessation program.

The themes uncovered in the narrative analysis of patients' dialogues are examined further in the following sections, which provide an analysis of the stories, identities and patterns revealed separately by each patient sub-group.

Motivated Successes

By utilizing certain words and emphasis during specific accounts, MS patients created two separate identities for themselves; one as a smoker and one as a nonsmoker, each of these selves centred on the patients' smoking behaviours. When commenting on his pre-cessation experiences, MS003 shifted between first- and third-person voices, stating: "You were doing it just because it was a habit that you were doing. So I said, oh, you know, I just shouldn't do it anymore I guess." However, in narrating his post-cessation identity, the patient asserted: "When I had my heart attack, I just said, that's it, no more; I am not going to do it again." The patient's use of passive language, the third person voice, and phrases such as "oh, you know" and "I guess" when narrating his pre-cessation experiences illustrate that his desire to quit was low and irresolute. However, the patient's discourse when speaking about his experiences as a nonsmoker, following a heart attack and time spent in the smoking cessation program, was definitive and confident, illustrating that his desire to quit and his confidence in being able to do so had risen.

This increase in self-efficacy was further demonstrated later in the narrative when the patient discussed his post heart surgery determination to quit smoking:

> *MS001*: I said to myself, I am not going to smoke again. And then the more, the longer I stayed smoke free, the more confident I got about it. And it seemed like there was less desire for it. And just my confidence level just kept going up and up and up... It sort of boosts you, it sort of feeds on itself.

This discourse is in line with DiClemente's (2003) assertion that it is during the *action* and *maintenance* stages of behaviour change that the role of self-efficacy is the most important. As discussed in Chapter Two, in the stages of *precontemplation, contemplation and preparation*, self-efficacy perceptions are based largely on "hopeful

expectations" (DiClemente, 2003, p. 198). However, once the individual has attained a certain stage of achievement, he is able to more accurately assess the level of difficulty associated with the given behaviour change, and the level of effort that will be required to achieve and maintain the new behaviour (DiClemente, 2003). The statement given above by MS001 demonstrates that, once the patient had achieved cessation, his confidence level was heightened, and continued to rise as he maintained his non-smoking behaviour. This suggests that self-efficacy is highly significant in the action and maintenance stages of addiction cessation, but that a separate factor must first trigger the stages of pre-contemplation, contemplation and preparation. The narratives of the MS group indicate that the primary factor in motivating these stages is a negative change in cardiovascular health. This narrative, along with several others that materialized in interviews with the MS group, is discussed below.

Several themes that emerged from the MS group regarding their cessation processes included *attitudinal factors*, *changes in health*, and *hospitalization* as crucial elements of the cessation process.

Attitudinal Factors

Having control over the addiction versus being controlled by the addiction. As discussed previously, the narratives of the MS group include considerably greater mention of changes in attitude than any other theme as a factor that lead to their success in smoking cessation. The word "control" appears frequently in the narratives of these patients, first to describe the feeling of being dominated by a nicotine addiction, and then to express a feeling of power over their smoking behaviour. One patient described his

smoking routine before his successful cessation attempt as something that governed his daily practices:

> *MS002:* After supper, I have to have a cigarette. I get up in the morning, I have to have a cigarette. It is a control. So you have no control, so you have no self-esteem to say 'No.'

Having a sense of control was also used positively in a context that equated a feeling of control over one's own actions with a feeling of confidence in one's ability to quit smoking. MS002 used the term when describing his post-cessation feelings regarding his ability to stay smoke-free:

> *MS002:* "I do have the control; I am going to take the control and I am not going to (smoke)."

In using the term "control" in a negative context when discussing feeling dominated by his addiction, and then in a positive manner when relaying his sense of control over the behaviour, MS002 highlighted the importance of a patient feeling in control of, and, subsequently, confident in his ability to quit smoking before being able to successfully meet his objective.

The root of confidence. Narratives of MS patients also consistently described confidence as a "feeling":

> *Interviewer:* When you went into the hospital last fall, you said that you were really eager to quit smoking.
>
> *MS004:* Yes.
>
> *Interviewer:* Were you confident in your ability to quit at that time?
>
> *MS004*: Guaranteed.
>
> *Interviewer:* How did that confidence affect your outcome, affect the fact that you are now not smoking?

MS004: If I didn't have that feeling I would never quit. I needed that to smarten me up, to put my foot down and that was it.

However, despite citing "confidence," "willpower," or a "mindset" as the driving forces behind their abilities to stay smoke-free, MS patients were largely unaware of the factors contributing to their confidence levels. Although they frequently discussed changes in health and the UOHI smoking cessation program as elements that assisted in their cessation success, their narratives suggested that they were unaware of an apparent link between the factors that assisted in their cessation achievement and their heightened levels of confidence in their abilities to stay smoke-free:

MS004: I know I have gone this far now and it's... I went further before, but not with the same type of confidence.

Interviewer: What is it exactly that is giving you that confidence?

MS004: I haven't got a clue... It is just that my mind is made up.

Similarly, MS001 describes "willpower" as his motivation to remain smoke-free:

MS001: I think willpower is the only thing. I don't know of any other, any other thing that would stop you (from smoking).

In Chapter Two, perceived self-efficacy was explained as an individual's belief that he or she can exert control over his or her health behaviour (Bandura, 2004). The narratives of the MS group illustrate that those who entered the smoking cessation program motivated to quit smoking, and who were ultimately successful, were able to establish a level of self-efficacy regarding smoking cessation that assisted them in quitting and remaining smoke-free. Interestingly, however, while participants went into significant detail regarding the factors that helped them to quit, they spoke of social influences, the UOHI smoking cessation program, and self-efficacy as separate elements, rather than accrediting their heightened level of self-efficacy to changes in health and the

support provided by the smoking cessation program. Patients did, however, link changes in their health (usually a heart attack) to their increased motivation to quit smoking.

Changes in Health

Each patient in the MS group cited changes in their health as the primary factor that motivated them to quit smoking.

> *MS003*: I have tried to quit several times before. I wanted to quit just because of my health; I found my breathing was starting to bother me a little bit. And I think, when I had my heart attack, I think it scared the living daylights out of me. And that sort of more or less reinforced my – you know, it enforced my conviction about quitting.

Feeling threatened by health problems and, subsequently, coming to a realization that the benefits of quitting smoking are significantly greater than the costs of doing so are sub-narratives that emerged in the dialogues of MS patients while they discussed their cessation experiences. MS002, for example, explained that, following his heart attack, the urge to smoke remained, but he was now acutely aware of "more important things," such as making a full recovery from his heart attack so as to be able to care for his children.

Similarly, MS001 identified his open-heart surgery as the most significant factor in his smoking cessation success:

> *MS001*: That's my biggest motivation, yes, that's for sure. Yes. I look at that scar every day and I say to myself, no way I am going to get a 'double-zipper' there.

In his repetition of the word "yes" and the conviction used in phrases such as "that's for sure" and "no way am I going to…" MS001 demonstrated the way in which his heart attack acted as a trigger for his increased smoking cessation self-efficacy.

While narrating their health change experiences, MS patients consistently highlighted that their health problems had forced them to view their smoking habits in a new manner. MS001, for example, described how, prior to quitting, he enjoyed smoking

cigarettes "for the most part." However, he then divulged that "there are times when you start to cough and then you say to yourself, what the heck am I doing this for?" By discussing his irritation with the cough that he associated with smoking, MS001 identified his comprehension of the costs of smoking to his health. In doing so, he demonstrated that an understanding of the benefits of quitting smoking versus the costs of continuing to do so may assist in the cessation process.

MS004 used similar language in describing his experience with cessation:

> *MS004*: It used to make me relax more than anything. But I am finding that every damn time you relax with a cigarette you are actually killing yourself, so it is time to stay away from them.

Frustration is apparent in the narratives of both MS001 and MS004 when they discuss their realization of the harmful affects of their smoking behaviours, particularly in the vigorous use of phrases such as "what the heck am I doing this for?" and "every damn time you relax with a cigarette..." In both cases, an understanding of the necessity for smoking cessation was not clarified until a life threatening health problem was experienced.

Hospitalization

Another narrative that emerged consistently throughout interviews with MS patients highlighted the UOHI smoking cessation program as a crucial element of the smoking cessation process.

> *MS001*: See, I knew I was going to be going under the knife. I knew that, and hearing my doctor's voice again saying, 'Bud, if you don't stay off of them you are going to end up back in here with the same problem.' And he was right.... I guess his warning and then the actual event happening of the problem with the blockages and the rest, that is when I took it to heart saying 'Boy, I guess maybe he is right – I had better get off the cigarettes.'

In the above account of the patient's conversation with his doctor regarding the consequences of his continued smoking, the patient's description of the exchange includes a turning point when he states: "That is when I took it to heart." This suggests he had applied a less serious commitment to previous cessation attempts, but had now been motivated by the combination of heart problems and a doctor's warning, which resulted in successful cessation.

MS003 also cited an enlightening conversation with a UOHI medical practitioner as a prompt in his smoking cessation effort:

> *MS003*: The surgeon at the Heart Institute, when he explained a lot of things to me about the smoking thing, it – because I never thought I would have a heart attack. I always thought I would get cancer from smoking, because cancer runs in our family. And when I had a heart attack so soon, and he said the major cause of it was smoking, I think that was a big factor in motivating me to quit.

MS003's recollection of this conversation reveals that, although he was aware that smoking may lead to the development of cancer, he was willing to accept this potential fate, seemingly because cancer was already inherent in his family. However, although he was willing to accept the risk of a disease that he had not yet developed, he was immediately concerned about his health and motivated to end his nicotine addiction when his doctor indicated that the patient's current health problems, including his heart attack, were the result of smoking. This suggests that a real understanding of the health problems associated with smoking, including the clarification of misconceptions by a respected health professional, may increase patients' motivations to quit smoking. However, MS003's discourse also suggests that patients have little motivation to change problematic health behaviour until they experience a serious, potentially life-threatening health problem.

In addition to physicians' and nurses' advice creating increased self-efficacy among patients, participants' discourses indicated that feelings of gratefulness towards UOHI staff, and a need to "repay" them for their assistance in the cessation process, also encouraged their efforts to quit smoking. MS004, for example, stated: "I figure if they are going to go through all that trouble to help me, I might as well go help myself a bit." MS002 also felt that program staff "deserved" his best smoking cessation effort:

> *MS002*: I never thought of them, the nurses and the doctors and the counsellors, I never thought it was a job for them. I thought that... I still do believe that it takes a special person to do that and, if that special person is going to take time out of their life to help me, to be there for me, then I think they deserve something in return. I am going to do everything in my power to succeed in this.

In the discourse above, the patient's description of the hospital staff as "special people" and the feeling that they had taken "time out of their life" illustrates the significant role played by hospital staff in encouraging the cessation efforts of smokers. As discussed previously, by taking advantage of situations in which smokers are likely to be motivated and more willing to receive advice, such as while they are hospitalized following a cardiac incident, hospital staff are able to successfully communicate with patients regarding the importance of smoking cessation in their specific situations (Revell and Schroeder, 2005).

Resistant Successes

Like those patients belonging to the Motivated Success sub-group, participants categorized as Resistant Successes (RS) also included discussion of attitudinal changes more than any other theme in the narrative accounts of their smoking cessation experiences. The thought processes of these patients when describing their experiences

demonstrated an obvious change in attitude, and in self-efficacy, during the course of their attempts to quit smoking.

When discussing her attitude towards cessation upon her admission to the hospital, patient RS002 stated: "When I first started – I think like most people… no, I wouldn't have quit at all, except for the fact that you can't smoke there." The patient's discourse suggests that "most people" are resistant to quitting when they first enter a smoking cessation program, indicating that she feels there is a certain level of acceptance of her behaviour, and that her reaction to quitting is the norm. The patient's initial unwillingness to consider quitting may be attributable to her tolerance towards smoking behaviour.

In his narrative, patient RS001 indicated that, although his heart operation was imminent and he understood that quitting smoking would be necessary following his surgery, he had little desire to quit smoking and, immediately following the surgery, he did not feel "ready" to quit.

> *RS001*: To me, (quitting) was inevitable. But I just didn't want to. I was giving something up.

The patient also discussed his long struggle with smoking cessation attempts, positioning his nicotine addiction as a significant element in his life story:

> *RS001*: I was always going to quit at a certain age, and never did, you know? I just, I don't know, I guess I just… I don't know if I had bad nerves or whatever it was, but I just wasn't ready.

RS patients mentioned *attitudinal factors* more than any other theme in their narratives regarding smoking cessation. However, they also discussed *social influences* and their experiences in the *UOHI smoking cessation program* at a consistent rate as factors that heightened their self-efficacy to quit smoking.

Social Influences

The narratives of RS patients included significant mention of social influences as factors that hindered their confidence in their abilities to quit smoking:

> *RS001*: I think what bothered me too was I know when we go and a couple of buddies of mine, we go on bike trips, a couple of bike trips a year. And you can't wait to stop, you know, when you are riding along, you can't wait to stop to have either a coffee, a drink, a beer or something and a smoke, you know what I mean. It is just sort of part of the thing to do, tradition to do, you know?

In this discourse, the patient discusses smoking as a significant factor in his life, referring to it as a "tradition." He narrates the experience of his bi-annual motorcycle tour as though it is a story, with a beginning, middle, and end. As he makes sense of the story, he includes smoking as a central element to the narrative.

The patient's emphasis on smoking as a social activity, in combination with frequent statements such as "I just didn't want to," indicate that RS001 attributes his initial resistance to smoking cessation to his lack of desire and effort, rather than to his perceived lack of ability. As discussed in Chapter Two, people's performance levels when endeavouring to achieve their goals are greater if they attribute their previous failures to lack of effort, rather than inadequate ability (Weiner, 1996). The narrative and successful outcome of RS001 is in line with this premise, suggesting that if an individual asserts that he is not "ready" or does not "want" to quit smoking, but also insists that he will be *able* to do so once his readiness and desire reach a certain level, his outcome is more likely to be positive.

Similar to RS001, patient RS002's positioning of her nicotine addiction within her narrative indicated that smoking was a significant part of her life story, linking the

"calming" effect of cigarette smoking to various challenges throughout her narrative. The patient attributed her difficulty with smoking cessation largely to stress:

> *RS002*: You are stressed out, you sit down, you relax, you have a cigarette. That might lead to you calming down and maybe having a different look at the problem.

The use of smoking as a relief for stress was a common theme among the narratives of patients from all sub-groups. For RS patients, in particular, viewing smoking as a way to deal with stressful situations seemed to contribute to their initial lack of desire to quit:

> *RS002:* Everybody handles stress different ways. I think smokers, that's their way. And it calms you down. You know, you kind of enjoy smoking, except for the bad effects.

This discourse suggests that RS002 understands the "bad effects," or health risks associated with smoking. As research indicates, however, self-efficacy is enhanced not only by an understanding of the hazards of a certain behaviour, but also by a perception that the perceived benefits of a preventative action outweigh the costs (Bandura, 2004; Bandura, 2000; Bandura and Locke, 2003; Shadel and Cervone, 2006; Van Der Rijt and Westerik, 2004). As indicated by the narrative of RS002, it is the perceived loss of the "calm" produced by cigarettes and the "enjoyment" of the act of smoking that negatively affected this patient's initial self-efficacy to quit. It is, therefore, important to determine the point at which the patient began to feel that the health benefits of smoking cessation outweighed the perceived costs of stress relief and the enjoyment of nicotine.

Based on the narratives of RS patients, social influences, including situational stress and the loss of experiences with friends, act as perceived costs to smoking cessation and may inhibit the initial self-efficacy of patients to quit smoking. What remains to be determined, then, is the factor that shifts the patients' willingness to quit smoking to a point at which cessation is feasible. The narrative patterns of RS patients

suggest that this factor is the information and assistance provided by the UOHI smoking cessation program in combination, as discussed above, with negative changes in health.

UOHI Smoking Cessation Program

The narratives of patients from all sub-groups indicate that the manner in which information is delivered by the UOHI smoking cessation program is an important factor in the smoking cessation process. In the narratives of the RS patients specifically, the smoking cessation program is cited as assisting in increasing patients' self-efficacy to quit.

> *RS002*: If nobody was there to talk to me, I would go out of the hospital thinking as I came in, that I couldn't quit. But when you have somebody go along, and they are not judging you, they are trying to help you, and they are pleasant, they are very nice, and they make it easier for you, then that sticks with you... But I think if I hadn't had that, no. I would leave the hospital and fall on my face.

The patient's narrative indicates the importance she placed on the congenial nature of the smoking cessation program staff. Further, the phrase "that sticks with you," suggests that, had the smoking cessation information been provided in a more static, less personable manner, the patient would have been less receptive to the advice, and her self-efficacy would have been less positively affected. Instead, the patient was able describe how her experience with the program created a turning point in her smoking cessation self-efficacy:

> *RS002*: I came there not wanting to quit, not – like it had been many, many years and I had been smoking, and it gets to be just habit. And no, I wasn't looking (to quit), and plus I didn't think I could. And something happened with the help that was given... and I really don't want to go back on it (smoking).

The patient also indicated that simply being in the hospital and restricted from smoking assisted her cessation effort:

> *RS002:* I guess you kind of think, oh, there is no way I can do this. I couldn't go a whole day without a cigarette; that would kill you. And then, with the help of the patch and then the puffer, well, that was just – you know, it made it so easy. Then you kind of, in your mind, you thought well, maybe I can. Maybe I can quit. But when you first come in, you don't want to, but also, I think if... you don't think you could anyway.

These narratives indicate that, after two days in the UOHI smoking cessation program without any access to cigarettes, but use of nicotine replacement therapies and assistance from UOHI staff, RS002's confidence in her ability to quit increased significantly. In using such exaggerated phrases as "a whole day without a cigarette" and "that would kill you," RS002 indicated that her initial resistance to quitting was based on the notion that her addiction was insurmountable. However, the narrative then became a story in which the patient relayed her change in attitude, credited to the confidence offered by the nicotine replacement therapy provided by the smoking cessation program.

Patient RS001 also narrated an experience with smoking cessation program staff that indicates the program's effectiveness in increasing his self-efficacy to quit smoking. Interestingly, the patient explained that, approximately 12 months prior to his admission to the hospital for heart surgery, he had spoken with a member of the smoking cessation program who he claimed had little effect on his desire to quit smoking:

> *RS001*: I think what (the nurse specialist) was waiting for was quitting smoking. All I got asked was 'Would you be willing to...' you know... And at that time, I guess I had too much on my mind. I said, 'Maybe, we'll see, down the road, whatever.'

Through indifferent phrases such as "we'll see" and "whatever," this account demonstrates RS001's unresponsiveness to his initial encounter with the UOHI nurse specialist one year before his heart surgery. However, the patient then described his "painful" recovery from heart surgery twelve months later, and explained that he "wouldn't want to have to go through it again." Further, RS001 attributed the information

provided to him by a nurse specialist following his heart surgery to a turning point in his understanding of the connection between smoking and cardiac problems. After a discussion with a nurse specialist about "redos" -- a second bypass surgery necessary for patients whose hearts continue to deteriorate after the first operation -- RS001 says he was convinced to quit:

> *RS001*: And, well, it was just when the nurse told me about redos, and I said you ain't redoing me.

Despite their initial resistance to the notion of quitting smoking, the narratives of RS patients indicate that information and advice provided by the smoking cessation program stimulated a shift in mindset regarding the benefits of quitting, subsequently enhancing their self-efficacy.

Motivated Non-Successes

The dialogues of patients categorized as Motivated Non-Successes (MN) included discussion of *social influences* as having affected their smoking behaviour more than any other narrative theme. Throughout the telling of their stories, it became clear that various social factors played equivalent roles in both the motivation and obstruction of these individuals' attempts to quit smoking. Further to social influences, MN patients also mentioned *attitudinal factors* and *hospitalization* at a similar rate, and *changes to health* to a lesser degree.

Social Influences

Family. Study participants who identified themselves as motivated to quit smoking upon entering the UOHI smoking cessation program but who ultimately did not succeed in quitting discussed the social factors of family and situational stress as those that created difficulties for them when attempting to quit smoking.

MN002, for example, stated that following his release from the hospital he remained smoke-free for several months; however, he conceded: "My wife didn't quit smoking. She kept blowing smoke in my face, so I started smoking again." The patient also mentioned that, during the time in which he was not smoking, his wife demanded that he recommence the habit because being smoke-free was making him "grouchy." The patient's choice of words and somewhat accusatory tone suggest that, to some degree, he holds his wife responsible for his inability to quit smoking. DiClemente (2003) explains that family influences play a role in the development of attitudes, expectancies and beliefs regarding health behaviour changes, and also that interpersonal relationships may be responsible for invoking peer pressure that either motivates or hinders an individual's self-efficacy. MN002's language suggests that his spouse's smoking and attitude towards his behaviour act as obstacles in his cessation efforts by creating a defeatist attitude within the participant, thus lowering his expectancies and beliefs about his ability to quit smoking.

MN003 also explained that she and her spouse both smoke, and described their smoking relationship as "co-dependent":

> *MN003*: We both want to quit, and then when either of us fail, we both end up smoking again.

The patient also stated: "I don't think anybody can really quit if somebody else in the house is smoking." Similar to the statements made by MN001, MN003 describes her ability to quit smoking as "dependent" on her spouse's smoking cessation efforts, and the latter statement suggests that she has resigned herself to the perception that, as long as her spouse is smoking, she does not have the ability to quit.

Situational stress and the habit of smoking. In addition to family influences affecting their abilities to quit smoking, participants within the MN group discussed situational stress and the "habit" of smoking as key factors obstructing them from quitting. MN001, for example, explained that smoking makes her feel "calm" during stressful situations. When asked what it is about smoking that calms her, MN001 integrated the act of smoking into her life story, equating a cigarette to a long-time acquaintance:

> *MN001*: I have been smoking for 32 years, so it's like my friend. It is somebody I have had, something I have done for years... I am used to it being around. So when I was upset, I needed that.

In this narrative, MN001 used the term "friend" to personify the cigarette and give it an important place within her life as something that had been dependable and constant during difficult situations.

MN003 also identified smoking as a form of stress relief. After explaining that both she and her spouse have attempted to quit in the past, she stated: "Stress seems to be the thing that pushes us back into it." When using the term "stress," the patient explained that she was referring to various instigators, including finances, work, and children. Specifically, MN003 explained that she had quit smoking following his discharge from the hospital, but several months later her house's septic system had malfunctioned, costing $25,000 to repair.

> *MN003*: So, you know, it's these types of major events that seem to push you (back into smoking).

MN003's discourse, first regarding the way in which smoking calms her during times of stress, and then regarding the notion that a major event in her life "pushed" her back into

smoking, illustrates the way in which his addiction is connected to all events within her life story, both regular and atypical.

MN003's experience is in line with Marlatt and Gordon's (2005) relapse prevention approach, which maintains that addiction relapse after a stage of cessation has been achieved may be induced by stress created through negative emotions, interpersonal tensions, and social pressures. This approach maintains that self reports of the ability to manage stressful situations without reverting to substance abuse reflects an individual's coping skills, thus assuming that those with high levels of self-efficacy during situational stress will be less likely to lose control and relapse. In her narrative, MN003 created a link between her relapse and specific stressful situations, suggesting that the patient has low self-efficacy during these circumstances, and is more likely to relapse.

Attitudinal Factors

Similar to the MS group, participants in the MN group identified that, in order to successfully quit smoking, they would need to be in a certain "mindset," and would need to feel "ready" to quit. When narrating his experience with the smoking cessation program, MN002 maintained that he did not find the literature and other information provided to him useful in his quest to quit smoking, because he believed that that only a particular mindset with no external assistance would lead him to quitting:

> *MN002*: I said to myself, if I am going to quit, I have to do it on my own. Watching films and that, going to Smokers Anonymous meetings, isn't going to help me. It is your own ability that is going to cause you to quit smoking.

This account suggests that, while MN002 indicated upon his admission to the smoking cessation program that he was motivated to end his addiction, he was in fact resistant to the efforts of smoking cessation program staff to help him quit.

Using similar language, MN001 stated that she does not believe external factors such as medication are useful in elevating her smoking cessation self-efficacy:

> *MN001*: Everybody relies on Zyban or the patch or going cold turkey, you know? And then, I don't know, but I am really – I get my mind into it... And that's how I am going to quit.

Further, MN001's narrative indicates that she believes having a particular frame-of-mind that is prepared to quit smoking will assist her motivation to quit:

> *MN001*: I just don't quit-quit; I work up to it... For me, it is really a mindset. I have to get my mind into a certain gear, into a certain mode, and then the rest is history.

MN001 explained that, when she has attempted to quit smoking, she has not "quit-quit," thus defining smoking cessation as a process that cannot be completed in a short period of time. Her narrative suggests that the patient is largely unaware of and/or resistant to factors that may contribute to a rise in her level of confidence. Instead, her narrative indicates that she believes her "mindset" is formed entirely by her own will, and cannot be influenced by outside assistance. Interestingly, however, in previous statements throughout her narrative, MN001 had credited external factors such as the "positive" and "upbeat" attitudes of the smoking cessation program staff, and the information they provided following her surgery, as useful in her cessation efforts. For example, she stated that the information pamphlets sent to her home made her aware of the fact that there are specific services available for smokers with cardiac problems who are trying to quit smoking.

Similar to comments made by MN001, language in the narrative account of MN003 illustrates that the patient's definition of the term "quit" was not one indicative of permanent smoking cessation:

> *MN003*: I know I can quit; I don't know if I can quit for good.

Further to this statement, feelings of frustration and defeat were evident in the patient's accounts of previous cessation attempts, and revealed the negative effect on her self-efficacy that had been created by multiple failed attempts:

> *MN003*: I have done it for years; quitting and then going back, and quitting and going back...
>
> *Interviewer*: Does that affect your confidence level?
>
> *MN003*: Totally, because I almost know I am going to smoke again. And I'm going to quit again, and I'm going to smoke again, and I'm going to quit again.

A previous section of this chapter examined the manner in which patient MS001's confidence continued to rise as the length of his cessation period increased. DiClemente (2003) asserts that once an individual has reached a certain level of achievement he is able to more accurately assess the degree of difficulty associated with ending his addiction and the level of effort that will be required to maintain the behaviour. The application of this concept suggests that MS001's confidence continually increased with cessation success because her achievement allowed her to perceive a lesser degree of difficulty in smoking cessation; but that MN003 experienced the opposite effect with her repeated lack of success, as her perceived difficulty of the task rose and, subsequently, her self-efficacy lowered with each failed quit attempt.

Further, MN003's discussion of continually quitting and then reverting back to smoking throughout her life strongly resembles language used by teenaged smokers in Moffat and Johnson's (2001) study, discussed in Chapter Two, which emphasized the importance of noting the words used by study participants when discussing smoking and nicotine addictions. For example, terms such as "quitting smoking" and "stopping smoking" had multiple meanings and were used by participants in very different

manners. The researchers maintain that it is important to note these "semantic distinctions" in order to gain a greater understanding of the meaning participants placed on those words (Moffat and Johnson, 2001, p. 678). In the current study, the narratives of MN001 and MN003 illustrate that the meaning they ascribe to "quitting" smoking is not a definitive end to their addictions but, rather, a brief suspension of their habit that they believe will last for only a short period of time.

Resistant Non-Successes

Patients who were categorized as Resistant Non-Successes (RN) had indicated upon their admission to the UOHI smoking cessation program that they were not interested in beginning the quit-smoking process during their hospitalization. It is notable that the duration of interviews with these patients was considerably shorter, on average, than with patients who were successful in smoking cessation, and even with the group who was originally motivated but ultimately unsuccessful in quitting.

The narratives of RN patients focussed mainly on *attitudinal factors*, *social influences* and *hospitalization*, while concentrating less on *changes to health*.

Attitudinal Factors

While RN patients, on average, discussed attitudinal factors more than any other theme in their narratives, their accounts were nonetheless more diversified than any other sub-group, showing fewer commonalities and greater multiplicity in levels of smoking cessation self-efficacy than other groups of patients.

Regarding his attitude towards quitting, RN002 stated: "I can't. I have tried everything. I have tried it before and just can't quit." His language indicates that the patient's repeated failed attempts at quitting smoking have negatively affected his self-

efficacy and placed upon him a feeling of defeat and submission. Similarly, when RN003 was asked about his goals in terms of smoking cessation he stated simply: "I don't think I can." Both patients' narratives indicate that they do not possess a level of self-efficacy that would allow them to complete the behaviour change. Given Weiner's (1996) assertion that people's performance levels when attempting to reach their goals are higher if they attribute their previous failures to inadequate effort, rather than lack of ability, the assertions by RN002 and RN003 that they simply "can't" quit is indicative of their failure to do so.

Conversely, areas of RN004's narrative would initially imply that, unlike RN003 and RN002, he is confident that he has the ability to quit smoking whenever he chooses. He stated that, upon his admission to the UOHI smoking cessation program, he was *resistant* to quitting smoking because he enjoys the behaviour, but was and remains *confident* that he will be able to quit smoking when he makes the decision to do so. However, the way in which RN004 communicated his story was disjointed and inconsistent, suggesting that his perceived confidence in his ability to quit may have been simply a result of the context in which he was telling his story; that is, during an interview regarding his experience with a specific smoking cessation program. For example, the patient stated: "If I want to quit, I will quit. If I don't, I won't." Immediately prior to this, however, he had relayed the story of a previous quit attempt during which he had remained smoke-free for just one month before relapsing when offered a cigarette while drinking at a New Year's Eve celebration:

> *Interviewer*: I hear that from a lot of people, that they associate having a drink with a cigarette.
>
> *RN004*: Yes

Interviewer: And that really gets them back into smoking.

RN004: Yes. Yes.

Interviewer: Would you say that's a pretty big factor?

RN004: Oh, I think so. Yes, I do.

As these conflicting narratives indicate, although the patient stated that his confidence in his ability to quit was high, potential barriers exist beneath his consciousness, such as his immediate linkage of drinking to smoking. These barriers became apparent as he attempted to make sense of his smoking cessation story.

Inconsistency was evident again during other phases of the interview: For example, early in the interview the patient stated that, following his discharge from the hospital, he reduced his smoking from 12 cigarettes per day to "two-or-three" per day. By the end of the interview, the patient's estimate of his daily smoking rate was five cigarettes. Thus, although his language when asked specific questions about his smoking cessation self-efficacy conveyed a sense of stubborn invincibility, the narrative inconsistencies revealed throughout his account suggest that his smoking cessation self-efficacy is low.

Patient RN001 also indicated that his self-efficacy was low, stating that he did not believe he currently possessed confidence in his ability to quit. According to Bandura's (2004) definition of self-efficacy, the health behaviour change process necessitates that a person perceive that he has the ability to exert control over his actions. While RN001's narrative indicated that he did not believe in his ability to quit smoking, it also illustrated that he understands the elements required to raise his self-efficacy.:

RN001: I'd like to really cut down. And if I do that, I just might be able to quit."

The patient explained that he was currently not confident in his ability to quit smoking, but that if he could begin the cessation process by reducing the number of cigarettes he smoked each day, the confidence created by this success may assist him in absolute cessation. While this illustrates that RN001 understands the method by which his confidence to quit may be increased, the patient's narrative also indicated that he was resistant to utilizing the assistance offered by the UOHI smoking cessation program in order to help him reduce his cigarette usage.

The attitudes of patients in the RN subgroup regarding the smoking cessation program continually shifted throughout their narratives, suggesting that, while they were resistant to accepting the program's assistance, their self-efficacy could benefit greatly from consistent contact with and support from the program.

Hospitalization

RN patients' narratives indicated that consistent contact and a more clear understanding of the role of the UOHI smoking cessation program may assist these individuals in their smoking cessation efforts. Other sub-groups mentioned that their contact with the smoking cessation program had provided them with new information that helped them to understand their addiction more comprehensively and, subsequently, increased their self-efficacy to quit smoking. However, the narratives of the RN group suggested that they were generally quite resistant to accepting information from program staff during their hospitalization, which consequently had a negative effect on their understanding of the relationship between their health problems and their smoking behaviours.

Accounts from each RN patient's narrative relayed misconceptions regarding smoking that could act as factors obstructing the patient's understanding of the importance of quitting smoking. RN002, for example, stated that smoking helped to calm his nerves and, therefore, he felt that it would be better for his health if he continued to smoke:

Interviewer: Why are you resistant now to quitting smoking?

RN002: Because of my health… I don't get as frustrated.

Notably, this patient recalled very little about his time in the smoking cessation program and said that, although literature was provided to him as part of the program, he did not recall having a conversation with program staff and he did not bring the literature home with him.

RN001 also conveyed a health-related misconception regarding his smoking behaviour. The patient explained that, following his discharge from the hospital, he reduced his cigarette usage, but eventually reverted to his pre-hospital rate of smoking. When asked why he reverted back, the patient stated: "Well, I – I figured I was getting better so I could smoke more, I guess."

Similarly, the following conversation took place with RN003:

Interviewer: Why were you resistant to smoking (when you entered the UOHI)? Why didn't you want to quit?

RN003: Hum – I don't know. I just have a feeling that, having smoked for over 60 years, that if I were to quit, it would be a real shock to my system.

Interviewer: A "shock to your system" – how so? Physically, or a shock to your –

RN003: Physically.

Interviewer: OK, so you think it would maybe be harmful to your health because you've been smoking for so long?

RN003: Yes.

Although the misconceptions of these patients vary, the discourse in each narrative indicates that the UOHI had little effect on their self-efficacy to quit smoking. While an immediate reaction may be to link this finding to the fact that the patients were resistant to accepting help or information from program staff, closer analysis and comparison of RN narratives to those of other groups reveals an inconsistency in the amount of attention patients say they were paid by program personnel. While other patients often used the names of their doctors, and recalled specific details of conversations with their nurse specialists, RN patients were more likely to claim that they either had little recollection of their involvement in the program, or that the information provided by the program had no effect on their smoking status, and were more likely to exhibit misconceptions regarding the role of the smoking cessation program.

For example, in several instances throughout his narrative, RN004 exhibited his perception that the goal of the smoking cessation program was to immediately reduce the patient's daily cigarette usage to zero. The patient also made statements such as "I don't know if I pleased them or not," during his account of his meetings with program staff. Further, he stated: "I know it's not successful in the eyes of the Institute, but as far as I'm concerned, I'm successful," when explaining how he had significantly reduced his cigarette usage following discharge from the hospital. In RN004's language regarding his relationship with staff, he revealed his misconceptions regarding the goals of the smoking cessation program, and indicated the sense of failure he felt when relating his successes to these perceived expectations.

RN003 also stated that advice from the smoking cessation program staff had little effect on him, claiming that the doctors and nurses told him he should quit smoking but, other than the fact that he was not actually permitted to smoke in the hospital, "there was no interference one way or the other." Further, RN002 suggested that he could not recall any interaction with program staff, "Except the doctor told me I should quit smoking."

RN001 communicated a slightly more positive recollection of his experience with the program, stating that, while he was not interested in utilizing the assistance of the program during his hospitalization, once at home he found time to review the literature provided and, while he found it "scary at first," he stated: "It did get me thinking." RN002 also indicated that, although he was resistant to learning more about the smoking cessation assistance offered by the UOHI during his hospitalization, he would now be more receptive to aid, adding that it would have to be something "local," as he lives in a rural area more than an hour from the Ottawa Hospital. Narratives such as these, indicating a lack of receptiveness to assistance during hospitalization but greater interest in support several months after discharge, may indicate a need for more rigorous and consistent follow-up with patients by the smoking cessation program after patient discharge.

Summary

A narrative analysis of interviews with patients from the UOHI smoking cessation program revealed numerous factors affecting an individual's level of smoking cessation self-efficacy, including attitudinal factors, social influences, hospitalization, and changes in health. These results are discussed further in the following chapter, examining the

significance of these findings in the context of social cognitive theory, and exploring the implications of this research for the fields of health and communication.

Chapter Five: Discussion and Conclusion

The narratives of participants from the University of Ottawa Heart Institute's inpatient smoking cessation program indicate that a participant's perceived self-efficacy to quit smoking upon admission to the program is not necessarily predictive of the patient's success or failure. However, the narratives also indicate that various factors occurring before, during, and after participation in the smoking cessation program may affect the patient's level of self-efficacy, either positively or negatively, and subsequently contribute to the participant's outcome.

Limitations

It should be noted that the conclusions presented in this thesis are based on analysis of a small number of patient narratives from a specific smoking cessation intervention program. The characteristics of these narratives may vary from those given by patients from a different intervention program, and patterns may have differed somewhat had a larger sample size been used. However, as discussed previously, research has indicated that the rich content and significant patterns that develop from personal interviews may often make qualitative data from a small sample more useful than a quantitative census of a larger population (Rubin et al., 2005)

Interviews

As noted in the previous chapter, several patterns formed in the structures and lengths of patients' interviews. Discussions with both the Motivated Success and Resistant Success groups usually continued beyond the anticipated 30 to 40 minutes, and included powerful dialogue with very thorough responses to questions. In contrast, the narratives of participants in the Resistant Non-Success and Motivated Non-Success

groups were much more succinct, with less comprehensive accounts of their smoking cessation experiences, their interviews tending to last only 20 to 30 minutes. This particular observation suggests that individuals are less willing to provide in-depth dialogue regarding efforts at which they are unsuccessful than those at which they are successful. As such, all qualitative data collected for the current study was examined closely to reveal the intentions behind participants' words, omissions, and sequences and contradictions in thought patterns throughout their narratives.

Findings

Perception of the UOHI Smoking Cessation Program

Analysis of participants' narratives revealed a link between the amount of time and personal attention patients claimed to have received from smoking cessation program staff and the result of their smoking cessation attempt. Patients who were successful in quitting smoking used positive language when discussing the program. These individuals described the program as a "personal" experience that aided them in ending their addictions. However, patients who were unsuccessful in smoking cessation used less positive language when discussing the program.

Lack of Ability versus Lack of Effort

RN patients' frequent use of phrases such as "I can't" and "I don't think I can," illustrates that their perceptions of their inabilities to quit smoking may have affected their overall smoking cessation self-efficacies, and lent to their unwillingness to accept advice from program staff. The narratives of these patients illustrate Weiner's (1996) distinction between failures in behaviour modification that are associated with a lack of effort, and those that are linked to perceived inability. This suggests that RN patients'

performance levels were lower than those of RS and MS patients because they attributed their previous failures to lack of ability, rather than inadequate effort.

Personal Assessments of Self-Efficacy

While the RN group's lack of success may be attributable to a perceived inability to quit smoking and the RS and MS groups' successes may be credited to increasingly heightened levels of self-efficacy, the MN group's narratives suggest that, while they may possess certain levels of personal agency towards smoking cessation, this efficacy is not being applied to all of the circumstances required to reach their goals.

As discussed in Chapter Two, Bandura and Locke (2003) maintain that perceived self-efficacy can predict the behavioural differences between people at varied stages of efficacy, and can predict changes in individuals at various levels of efficacy over time. Further, the authors explain that individuals must assess their levels of self-efficacy to overcome difficult emotional situations and self-encumbering thought patterns. Narrative analysis of patient interviews in the current study illustrates that, although MN patients expressed a belief in their ability to one day quit smoking, they did not maintain this personal agency in all of the situations and emotional states that may have triggered their smoking behaviour. As a result, they reverted back to smoking during stressful or difficult emotional circumstances and their self-efficacy levels were subsequently lowered rather than increased to a stage that would assist them in smoking cessation.

Environment and Emotion: Shaping Self-Efficacy

Research regarding self-efficacy and drug abuse has revealed that substance users' personal agencies could be best illustrated by three components: environmental factors, negative mood, and positive mood (De Weert-Van Oene et al., 2000). As such, it

has been found that self-efficacy is not a consistent characteristic of each individual, but is instead dependent on the situation in which the person finds himself. Further, Fiorentine and Hillhouse (2003) found that self-efficacy is shaped by a number of factors, including experiences with success and failure, social experiences, persuasion produced by others, and various physical and emotional states. Applied to the current study, this aids in explaining why numerous patients with similar heart conditions were considerably varied with regards to their initial readiness to quit smoking.

Patients' stories revealed the context of their lives as smokers, and included discussions of their environments and life circumstances upon their admissions to the smoking cessation program. Different emotions and environmental factors created varied degrees of self-efficacy.

Overall, MS patients discussed their heart attacks as shocking events that forced them to re-examine their lives and evaluate the benefits of quitting smoking more closely. In accordance with these results, research illustrates that those who believe they will succeed, and perceive that the benefits of their preventative actions outweigh the costs, are more likely to initiate behaviour change than those who possess less self-efficacy (Bandura, 2004; Bandura, 2000; Bandura and Locke, 2003; Shadel and Cervone, 2006; Van Der Rijt and Westerik, 2004). MS patients' heart attacks acted as catalysts, allowing them to understand their smoking behaviour in a new context. This placed greater emphasis on the advantages of smoking cessation and less concern on the costs of the preventative behaviour.

Meanwhile, RS patients revealed that social influences and situational stress lent to their initial resistance to quitting smoking, which stemmed from a desire to maintain a

comfort on which they had relied for decades. However, these patients also explained that gaining greater knowledge of the benefits of smoking cessation ultimately assisted them in quitting. These results support research by Ilgen et al. (2005), which emphasizes the importance of the relationship between abstinence self-efficacy and substance abuse treatment outcomes. Findings from the research emphasize that the quality of the relationship between therapist and patient while undergoing substance abuse treatment works together with initial levels of self-efficacy to predict treatment outcomes. As such, those who enter interventions with little self-efficacy, such as the current study's RS patients, may have similar results to those who entered with high self-efficacy if they are part of a strong therapeutic relationship throughout the smoking cessation process.

Research by Van Der Rijt and Westerick (2004) explains that anxiety regarding problems associated with quitting, such as fear of withdrawal symptoms, in addition to low self-efficacy, may produce cognitive dissonance among smokers who have reached a point where they very much desire to quit but feel unable to do so. As such, smokers who aim to quit 'someday' will have an imprecise vision of the meaning of quitting smoking, while patients who wish to quit immediately will have a clearer image of the obstacles ahead, making them more likely to experience difficulties (p. 192). In line with this finding, participants in the current study's MN group maintained that they had felt a strong desire to quit upon their admission to the smoking cessation program, but had been impeded by social circumstances and resignation during stressful situations. These patients' narratives included frequent mention of pre-existing obstacles that immediately re-emerged upon the individuals' attempts to quit smoking, making their goals seem inaccessible and leading to their failed cessation attempts.

Finally, RN patients exhibited feelings of defeat based on previous failed attempts to quit smoking and held obstinate attitudes towards accepting help. These factors almost certainly contributed to their low levels of self-efficacy upon admission to the smoking cessation program. As discussed previously, an individual's attribution of failure to a lack of ability rather than a lack of effort may play a significant role in the outcome of his or her attempted health behaviour change (Weiner, 1996). As such, their initial feelings of impossibility towards smoking cessation, combined with personal circumstances and situational stress that they perceived as impediments to their efforts, made RN patients much less likely to accept assistance and information from the smoking cessation program and, therefore, less likely to succeed.

The Effects of Intervention

Knowledge of a patient's feelings regarding his or her readiness to quit smoking is essential to the success of a smoking cessation intervention program, as these feelings of readiness can assist counsellors in evaluating the individual's level of self-efficacy. Findings from the current study suggest that the particular environment and context within which the patient exists at the time of admission to an intervention program play a role in constructing his or her level of self-efficacy. As such, conversations between counsellors and patients should examine both the positive environmental factors that may heighten self-efficacy -- such as supportive family and better health -- and the negative factors that may act as impediments -- such as social influences and situational stress -- in order to heighten the patient's awareness of the factors that may either motivate or hinder his or her smoking cessation efforts. This is in line with Maddux and Lewis' (1995) premise that evaluating specific self-efficacy expectancies regarding particular

behaviours and goals can assist intervention counsellors in understanding which of the patient's beliefs and behaviours require modification in specific situations to help the patient experience success and increase situation-specific self-efficacy.

Almost all narratives in the current study -- both those of successes and non-successes -- included some mention of the relationship between the patient's nicotine addiction and stressful situations. While many factors that may have motivated or lowered their smoking cessation self-efficacy largely differed between sub-groups, the notion that smoking calmed the participants during periods of stress, emergency, or trauma was common throughout all discourses. Further, patients' narratives frequently mentioned either their satisfaction with the personalized experience they had received as part of the smoking cessation program (in the case of MS and RS patients), or their discontent with the lack of personalized information provided by the program to assist them with their specific smoking cessation impediments (in the cases of RN and MN patients). Combined, these results suggest that a more personalized intervention program -- beginning upon the patient's admission and continuing after discharge and throughout the individual's smoking cessation attempt -- is necessary in order to positively affect patients' self-efficacy levels.

Research has indicated that personalized counselling from smoking cessation intervention programs can increase individuals' chances of quitting smoking (Coleman, 2004; Hajek, 1989; Revell and Schroeder, 2005; Stevens, Glasgow, Hollis, and Mount, 2000; *Tobacco use cessation programs*, 1995). Based on the analysis of narratives given by patients from the UOHI smoking cessation program, results of the current study suggest that an individual's initial smoking cessation self-efficacy is largely determined

by the environment and context in which they live, forming their attitudes not only towards smoking cessation, but also towards accepting assistance in this goal. As such, findings suggest that effective smoking cessation counselling should first consider the level of personal agency held by a patient with regards to smoking cessation, and follow this assessment with personalized counselling based on the patient's initial smoking cessation self-efficacy.

Conclusion

The study's findings illustrate the social, physical and psychological barriers and motivating factors that exist for cardiovascular patients in the process of quitting smoking. The current study supplements past research illustrating that in-hospital programs are among the most influential smoking intervention strategies, because they utilize situations with the ability to motivate smokers to quit by offering patients personalized intervention programs. Results of this study have found that closely examining the narratives of smoking cessation intervention patients, including careful analysis of the meanings attached to smoking as part of a larger life story, can assist in understanding the factors that motivate or inhibit patients' levels of smoking cessation self-efficacy. Communicating their stories regarding past attempts and current successes and challenges allowed patients to make sense of the smoking cessation process.

The study's qualitative data has provided answers to the central research questions:

Regarding the first question, motivating factors in the smoking cessation efforts of cardiovascular patients, the study illustrates that these factors include the strength of the relationship formed by communication between patients and intervention specialists,

which can assist in raising an individual's self-efficacy to end an addictive behaviour. Further, the maintenance of initial levels of self-efficacy throughout challenging emotional and social circumstances assists in raising an individual's personal agency further, and acts as a motivating factor in the smoking cessation process, invoking feelings of pride and confidence. Finally, a willingness to accept advice and support from both intervention specialists and peer groups can subsequently raise an individual's self-efficacy and assist him or her in quitting smoking.

With regards to the second question, impeding factors in the smoking cessation efforts of cardiovascular patients, the data suggests that a lack of communication between patients and intervention specialists can negatively affect self-efficacy, as misconceptions regarding potential costs and benefits of a behaviour change and potential impediments or support options are less effectively relayed to the patient. Further, an unwillingness to accept advice and support from intervention specialists can subsequently lower an individual's self-efficacy. In addition, reverting back to smoking during challenging situations or emotional states after undergoing a period of cessation can lead to lowered self-efficacy.

Finally, regarding the third question, how motivating and impeding factors are revealed through the narrative analysis of patients' own communication regarding their smoking cessation experiences, the study demonstrates that the emphasis placed on specific moments or events throughout patients' smoking cessation attempts is illustrative of the factors that have either motivated or hindered their behaviour change efforts. Further, both the positive and negative language used by patients to discuss specific events and characters involved in their smoking cessation processes revealed the factors

that patients themselves saw as encouraging or impeding elements in their health behaviour change efforts. It is clear that the narrative patterns analyzed in this study supplement quantitative data collected by the UOHI to provide a more holistic understanding of factors motivating or impeding cardiovascular patients in their cessation efforts.

The study's findings are applicable to numerous categories of health behaviour change. As discussed in Chapter Two, the types of addiction that can be examined based on social cognition and self-efficacy assessment are abundant, including eating disorders, alcohol problems, drug abuse, and tobacco cessation. As such, results gathered from the current study may be applicable to a variety of addiction intervention programs, particularly with regards to outlining the importance of patient-caregiver communication and personalized intervention strategies.

This thesis may provide researchers in both the health domain and the field of communication with new insights regarding the factors involved in an individual's choices on the subject of smoking cessation. This, in turn, may enable the adaptation of health professional training with regards to cessation counselling. As a result, this research may provide support to health domain personnel and researchers during the implementation of new policies and both in-hospital and community service practices. Further, with regards to the field of communication, this research contributes to development in the area of narrative analysis by underlining the importance of personal stories in the examination of the health behaviour change process.

Findings from this study may assist intervention program specialists in understanding the factors that motivate and impede smoking cessation self-efficacy, thus

encouraging communication between patients and caregivers to reveal patients' fears, to clarify misconceptions, and to advise individuals of various support options available during the behaviour change process. Additionally, the study's findings illustrate the importance of personalized intervention programs in the process of addiction cessation, which may assist intervention specialists in framing programs around each patient's specific health problems and personal and social circumstances. Further research, through continuing to converse with intervention patients, will allow a better understanding of the ways in which smoking cessation programs may assist individuals at all levels of self-efficacy in quitting smoking.

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Appendix A: Interview Protocol

Telephone Script and Interview Questions

Telephone Script:

- Hello, could I please speak with (patient name)?

- Hello Mr./Mrs./Miss/Ms._____. My name is Erin Rollins. I am a graduate student at the University of Ottawa working with the University of Ottawa Heart Institute on a smoking cessation study. I am aware that a representative from the Heart Institute contacted you several weeks ago to discuss your interest in the study. Are you still interested in participating?

- **IF NO:** Ok, thank-you for your time. Please remember, if you ever need additional assistance in developing a new plan to quit smoking or to stay smoke-free, the Heart Institute can help you. A smoking cessation specialist is available to call you and discuss the Heart Institute's programs in detail. *(Provide contact information if necessary)* Have a nice day.

- **IF YES**: Ok, that's great. Have you received a copy of the consent form in the mail, and had a chance to review it?

- **IF NO:** Since you haven't yet received the consent form, I will contact you in a couple of days once you have received the form and had a chance to review it. If it's convenient for you, we can re-schedule the interview at that time.

- I look forward to speaking with you further. Have a nice day.

- **IF YES:** Do you have time to talk right now, or is there another time that you would prefer to speak with me? The interview will take about 30 to 40 minutes.

- **IF NOT AVAILABLE TO SPEAK**: Ok, could you tell me a time during the next few days when you would be available to speak with me for about 30 to 40 minutes? .... *(participant tells interviewer convenient time)*... Great! I look forward to speaking with you at that time. Have a nice day.

- **IF AVAILABLE TO SPEAK:** Ok. First, I need to know that you have no objections to this interview being taped. Do you consent to the interview being audio-taped?

- **IF NO**: That's absolutely fine. However, since this study requires transcripts of audio-taped interviews, participation requires audio-taping consent. If you would prefer not to be taped, I will withdraw your name from the list of participants if you prefer. Thank-you for your time. Please don't hesitate to contact the Heart Institute if you have questions about this study at a later time. Have a nice day.

IF YES: Ok, thank-you. I will now turn on the audio-tape. I would like to review the Patient Information Sheet with you and tape your verbal consent to participate, so that we have this on record. Please ensure you have the form in front of you so that you can review it with me.

(RESEARCHER READS CONSENT FORM)

- Do you have any questions about the Patient Information Sheet? *(If yes, answer questions. If not, proceed).*

- Have all of your questions at this time been answered to your satisfaction?

- Do you voluntarily agree to participate in this study?

- FOLLOWING RECEIPT OF VERBAL CONSENT: Ok, great. We'll begin with a few background questions about your smoking. (Begin questions based on patient's smoking status – Motivated Success, Motivated Non-Success, Resistant Success, Resistant Non-Success)

(a) Motivated Successes

How old were you when you first used tobacco?

How many people do you live with who use tobacco?

Does your spouse/significant other use tobacco?

Why did you want to quit?

How many times have you tried to quit in the past?

Have you ever successfully quit in the past? (where "successful" is defined as more than 7 days smoke-free)

What helped you with your success?

What do you think will help you to not start again?

What are your goals now?

How will you know you are successful?

What fears do you have about your ability to stay tobacco-free?

What encourages you to stay smoke-free?

What keeps you from being smoke-free?

(b) Motivated Non-Successes

How old were you when you first used tobacco?

How many people do you live with who use tobacco?

Does your spouse/significant other use tobacco?

Why did you want to quit?

How many times have you tried to quit in the past?

Have you ever successfully quit in the past? (where "successful" is defined as more than 7 days smoke-free)

What factors have kept you from quit smoking?

Would you say you had any types of successes in your efforts to quit? What were they?

What helped you with these successes?

What are your goals now?

How will you know you are successful?

(If still motivated to quit) What fears do you have about your ability to become smoke-free?

(c) Resistant Successes

How old were you when you first used tobacco?

How many people do you live with who use tobacco?

Does your spouse/significant other use tobacco?

Why were you initially resistant to quitting?

How many times have you tried to quit in the past?

Have you ever successfully quit in the past? (where "successful" is defined as more than 7 days smoke-free)

What helped you with your success?

What do you think will help you to not start again?

What are your goals now?

How will you know you are successful?

What fears do you have about your ability to stay tobacco-free?

What encourages you to stay smoke-free?

What keeps you from being smoke-free?

(d) Resistant Non-Successes

How old were you when you first used tobacco?

How many people do you live with who use tobacco?

Does your spouse/significant other use tobacco?

Why did you want to quit?

How many times have you tried to quit in the past?

Have you ever successfully quit in the past? (where "successful" is defined as more than 7 days smoke-free)

Why are you unwilling to quit smoking?

What factors have kept you from quitting smoking?

Would you say you had any types of successes in your efforts to quit? What were they?

What helped you with these successes?

What are your goals now?

How will you know you are successful?

(If still motivated to quit) What fears do you have about your ability to become tobacco-free?

END OF QUESTIONS

- Those are all of the questions I have for you. Do you have any questions for me? (*If yes, respond to questions. If no, proceed)*

- Thank-you for taking the time to speak with me today. If you have any questions regarding this study, please feel free to use the contact information provided on the Patient Information Sheet.

- Have a nice day.

Appendix B

Ethics Documents

UNIVERSITY OF OTTAWA
HEART INSTITUTE
INSTITUT DE CARDIOLOGIE
DE L'UNIVERSITÉ D'OTTAWA

January 11, 2007

Dr. Robert Reid
Division of Cardiology
Prevention & Rehabilitation Centre
H2
University of Ottawa Heart Institute
Ottawa Hospital - Civic Campus

Dear Dr. Reid:

Re: Protocol # 2006799-01H **Explorations of Self-Efficacy: Personal Narratives as Qualitative Data in the Analysis of Tobacco Cessation Efforts**

Protocol approval valid **Thursday, January 10, 2008**

I am pleased to inform you that your study (listed above) was given expedited review by the University of Ottawa Human Research Ethics Board (HREB) and is approved. The English Patient Information Sheet and Consent Form, dated November 2006 is approved and has been **validated until January 10, 2008.** Since there will be no recruitment of Francophone subjects for this study, no French consent form is required.

No changes, amendments or addenda may be made in the protocol without the HREB review and approval. The validation dated should be indicated on the bottom of all consent forms and information sheets (see copy attached). Approximately two months prior to the expiration date listed above, a single renewal form should be sent to the HREB office.

The Tri-Council Policy Statement requires a greater involvement of the HREB in studies over the course of their execution. The HREB will review the new information to determine if the protocol should be modified, discontinued, or should continue as originally approved.

Yours sincerely,

Dr. James A. Robblee
Chairman
Human Research Ethics Board

/lh
Encl.

UNIVERSITY OF OTTAWA
HEART INSTITUTE
INSTITUT DE CARDIOLOGIE
DE L'UNIVERSITÉ D'OTTAWA

June 6, 2007

Dr. Robert Reid
Division of Cardiology
Prevention & Rehabilitation Centre, H-2101C
University of Ottawa Heart Institute
40 Ruskin Street
Ottawa, ON K1Y 4W7

Hello Dr. Reid:

RE: HI Protocol # 2006799-01H **Explorations of Self-Efficacy: Personal Narratives as Qualitative Data in the Analysis of Tobacco Cessation Efforts**

The Human Research Ethics Board (HREB) acknowledges receipt of the Amendment Report, dated April 24, 2007, and the e-mails from Erin Rollins, dated May 28, 2007, May 29, 2007, and May 30, 2007, confirming that, "... verbal consent will be obtained from study participants prior to audio-taping procedures beginning." Approval has been granted for the revised English Patient Information Sheet, dated May, 2007, and the revised Ethics Proposal - Research Summary, including the telephone script.

Should you have any questions and/or concerns, please let us know.

Ethical approval remains in effect until January 10, 2008.

Yours sincerely,

James A. Robblee, MD, FRCPC
Chairman
Human Research Ethics Board

Encl.

JR/ai

Université d'Ottawa University of Ottawa
Service de subventions de recherche et déontologie Research Grants and Ethics Services

SOCIAL SCIENCES AND HUMANITIES RESEARCH ETHICS BOARD

CERTIFICATION OF ETHICAL APPROVAL

This is to certify that the University of Ottawa Social Sciences and Humanities Research Ethics Board (REB) has examined the application for ethical approval for the research project **Explorations of Self-Efficacy: Personal Narratives as Qualitative Data in the Analysis of Tobacco Cessation Efforts (File # 01-07-23)** submitted by Erin Rollins and supervised by Jénepher Lennox-Terrion of the Department of Communication and Robert Reid of the University of Ottawa Heart Institute. The members of the REB found that the research project met appropriate ethical standards as outlined in the Tri-Council Policy Statement and in the Procedures of the University of Ottawa Research Ethics Boards, and accordingly gave the research project a Category Ia (Approval).

This certification is valid for one year from the date indicated below.

February 20, 2007
Date

Catherine Paquet
Protocol Officer for Ethics in Research
For the Chair of the Social Sciences and Humanities REB
Richard Clément

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Ethics File #01-07-23
From: **Ethics** (ethics@uottawa.ca)
Sent: May 9, 2007 5:10:09 PM
To: ;
Cc: Catherine Paquet (cpaquet@uottawa.ca)

Dear Professor Lennox-Terrion, Dr. Reid and Ms. Rollins,

The Social Sciences and Humanities Research Ethics Board (SSH REB) of the University of Ottawa has examined your request dated April 24, 2007 for ethics approval of the following modifications to your research project entitled **Explorations of Self-Efficacy: Personal Narratives as Qualitative Data in the Analysis of Tobacco Cessation Efforts (#01-07-23):**

- Consent forms and Information Sheets: The consent form will be read to patients over the phone prior to the interview taking the place. The consent form and the patient's voluntary consent will be audiotaped. A paper copy of the consent form will be mailed to participants prior to the interview so that they may view the form prior to the interview.
- Research Design or Methodology: Patients will be interviewed by the researcher by audiotaped phone interviews instead of face-to-face interviews.

Your request has been accepted. The certification of ethical approval that you received on February 20, 2007 for your project thus covers these amendments to your research project.

You will need to submit an Annual Report in February 2008 to either renew the approval or to close your file. Should you have any questions or comments, please do not hesitate to contact us by e-mail or by phone (613) 562-5841.

Best regards,

Leslie-Anne Barber

Administrative Assistant

Research Grants and Ethics Services

University of Ottawa