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UMI®
A QUALITATIVE STUDY OF THE
OCCUPATIONAL STATUS AND CULTURE OF
DENTAL HYGIENE IN CANADA

BY

ELLEN G. BROWNSTONE

A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
for the Degree of
DOCTOR OF PHILOSOPHY

Department of Sociology
The University of Manitoba
Winnipeg, Manitoba
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A Qualitative Study of the Occupational Status and Culture
of Dental Hygiene in Canada

BY

Ellen G. Brownstone

A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University
of Manitoba in partial fulfillment of the requirements of the degree
of
Doctor of Philosophy

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ABSTRACT

Dental hygiene is a female dominated occupation, whose members provide preventive and therapeutic oral health services to the public. Generally, dental hygienists in Canada believe that the occupation of dental hygiene is being transformed from a semi-profession to a profession. However, minimal research has been undertaken to study the occupational dimensions of dental hygiene. Most research has been clinical and educational in nature. The purpose of this qualitative study was to explore and conceptualize the culture of dental hygiene and its occupational status from the perspectives of its members, that is, dental hygienists and dental hygiene students.

An integrated conceptual framework of symbolic interactionism and conflict oriented neo-Marxist and neo-Weberian theories of professionalism served as the primary basis for examining the phenomena under study. By using an interactionist approach, the investigator was able to explore and analyze the perceptions and experiences of the participants to determine whether or not they have a common understanding of the professional project of dental hygiene. In-person interviews were conducted with 48 hygienists and students who were representative of members of constituent groups within dental hygiene in Canada. A comparison sampling of dental hygienists who differed in education, practice, and regulatory factors by province/region was also made. This data source was supplemented with content analysis of selected documents.

One core theme and four major themes emerged from the findings: Dental Hygiene in Transition (core), Development and Profile of Dental Hygiene, Relationships Between Dental Hygiene and Dentistry, Dimensions of the Professional Project of Dental Hygiene, and Dental Hygiene Education. The study uncovered similarities and differences in the conceptualization of the occupational status and culture of dental hygiene. Results of the research provide an initial understanding of the perceptions of dental hygienists with respect to the historical development of the occupation, self-identity, public image, cultural
aspects and the changing nature of dental hygiene, educational practices, relationships between dental hygienists and dentists, and the dimensions of dental hygiene's professional project. Generally, participants believe that the professional status of dental hygiene is increasing, however, they were unable to articulate a common or concise understanding of the professional project of dental hygiene. The findings of this study provide a first systematic step in examining the complex culture of dental hygiene in relation to its professionalization.
DEDICATION

In memory of my grandmother

*Clara (Brownstone) Sheps*

who from the time I was a little girl believed in me and taught me the value of education

and "my other dad"

*Albert Dawson*

who shared with me his learnedness, his time, and his love of scholarship
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CHAPTER ONE

INTRODUCTION

Professions are a pervasive entity in modern society. Bullough (1966) states that "striving to be identified as a professional is one of the motivating factors in modern life" (p.1). Critical theorists claim that emerging professional groups often get caught up in the "trappings" of established professions such as medicine and law, and that such occupational characteristics become the focus of "professional projects" (Freidson, 1970; Johnson, 1972; Larson, 1977; Turner, 1987; Willis, 1989; Blishen, 1991; Witz, 1992). However, despite claims of professional status by occupations such as teaching, nursing, and dental hygiene, these groups have failed to achieve the professional hegemony, authority, and autonomy enjoyed by, for example, medicine or law. The critical tradition in the sociology of professions asserts that the attainment of professional status is often the outcome of a successful political and social struggle, or sometimes, an inter- or intra-occupational battle to legitimate certain privileges and economic rewards. Other issues relevant to professionalism include professional dominance and power, gender relations, the nature of professional work, the division of labor, and acceptance of professional status by the state and society.

This research is a study of the culture of dental hygiene and its occupational status. The primary focus of the dental hygiene occupation, which originated in 1907, is the promotion of oral health and the prevention of dental disease. At the individual level, dental hygiene practitioners view themselves as health care professionals who possess specialized training and skills. At the organizational level, the following characteristics are representative of dental hygiene in Canada today: established clinical practice standards, Code of Ethics, self-regulation in five jurisdictions representing more than 90% of the dental hygiene population, a defined commitment to improving the oral health of
Canadians, formal socialization during training, a quality assurance practice model, a
service ethic, provincial and national professional associations, 65% membership in the
Canadian Dental Hygienists Association, formal education programs at the diploma and
baccalaureate levels, and an increasing level of research (Health & Welfare Canada, 1988;
S. Vanwart, personal communication). Based on these characteristics, dental hygiene
claims to be moving from a semi-profession towards full professional status with some
success (Motley, 1986; Brownstone, 1988; Smith, 1991). However, in spite of the fact
that the occupation of dental hygiene has acquired many of the traits normally associated
with professionalism, it has no prevailing ideology, and is dominated, and in many
provinces regulated, by the dental profession.

At the same time that organized dental hygiene is making certain claims of
professionalism, many Canadian dental hygienists continue to work under the authority and
supervision of dentists and have little control over the scope of their practice or work
setting. There are a few independent dental hygiene practitioners in Canada: the majority
are salaried employees in private practice settings. Although dental hygienists are gaining
political support from government, as witnessed by the recent passing of self-regulation
legislation in Saskatchewan, Alberta and British Columbia, organized dentistry continues to
lobby actively to maintain the status quo, that is, to have dental hygienists remain under the
control and authority of dentists. The majority of the dental hygiene workforce is
comprised of women, while dentists are predominantly men (Poindexter, 1993). At both
individual and institutional levels, dental hygienists work in a patriarchal environment
where "women's work" has been traditionally undervalued, creating negative stereotypes
of dental hygienists as subservient, passive, mere income earners for dentists, and as
"workers" rather than "professionals."

In spite of the fact that the occupation of dental hygiene has made self-
proclamations of professionalism, little research has been conducted to determine and
understand the complex culture of dental hygiene in relation to its professionalization.
Studies of dental hygiene have concentrated on practice patterns, certain characteristics of the workforce, professional socialization, clinical research, and educational issues. However, a formal investigation of the professional views, beliefs, perceptions, and attitudes of dental hygiene's membership nationally has never been conducted. A comprehensive examination of the social, economic, political, class, and gendered circumstances of this occupational group would establish the foundation for understanding the culture of the occupation of dental hygiene and its professional status.

The professional project of the occupation of dental hygiene has produced both successes and failures. Turner (1987) states that while an occupation can increase its professional status through control of its services in the market place, an occupation may become de-skilled and de-professionalized by changes in the market, developments in forms of knowledge, or new technology. As dental hygienists gain powers of self-regulation in some jurisdictions, in other jurisdictions organized dentistry has been successful at deregulation and de-skilling (Lyons, 1992). For example, several years ago the Manitoba Dental Association (MDA) imposed its power as the regulating body for dental hygienists licensed in the province to delete a long standing dental hygiene procedure from a list of legally recognized services. This procedure had been provided by dental hygienists for the past thirty years. The MDA did this despite the formal opposition and disagreement of the Manitoba Dental Hygienists Association.

On the surface, it appears that dental hygiene as an organized occupation is unified in its approach and its efforts to professionalize, but it continues to function in a way that is limited in power by the highly structured and predominantly male profession of dentistry. Questions of role identity, perceptions, motivation, work experience, inter- and intra-professional relationships, and efforts to formulate an emerging ideology must be addressed in order to uncover the barriers and enabling influences/factors in dental hygiene's professional project. The occupation of dental hygiene must be studied in a systematic fashion in order to conceptualize the culture of dental hygiene. This study
provides an understanding of the structure, organization, inter-occupational relationships, work roles, perceptions, and socialization factors involved in dental hygiene's professional project. The findings of the study have implications for practice and education, for the continued growth of dental hygiene (professional) organizations, and for further research. They provide a theoretical conceptualization of the dental hygiene culture.

**Problem Statement**

This is an exploratory, descriptive and analytical investigation of the dental hygiene occupation in order to conceptualize the status and culture of dental hygiene in Canada. At present, there are approximately 13,500 dental hygienists in Canada (Health Canada, 1992; Canadian Dental Hygienists Association, 1999b). The general membership of dental hygiene is comprised of constituent groups which include: practitioners in private dental offices (85%) and in acute/long-term care institutions, and community health settings (9%); educators (4%); managers in leadership positions in professional associations and licencing bodies; consultants and researchers (1%); practitioners in the Canadian Armed forces (1%); and dental hygiene students (Johnson, 1989). Using qualitative research methods, the perceptions of representatives of constituent groups of dental hygienists in Canada were sought in order to study the culture of the dental hygiene occupation.

For the purposes of this study, dental hygiene representatives were studied as a first systematic step in documenting dental hygiene's culture from the perspective of its own membership. Future research might examine the perspectives of other persons and groups associated with dental hygiene's culture, such as dentists, government officials, and the public. The primary question that was addressed in this study was "What are the perceptions, beliefs, and experiences of representatives of the dental hygiene community with respect to the professionalization of dental hygiene?" In order to conceptualize the culture of dental hygiene, it is essential to know whether the occupation's own members
have a shared understanding of who they are, as well as their purpose and role in society.

Specific questions that arose from this general problem statement include:

1. What is meant by the phrase "professional project of dental hygiene"? 
   Who is engaged in this project and why?
   Are dental hygiene's professionalization strategies like or unlike similarly placed 
   professional projects of occupations such as nursing? How?

2. What are the beliefs held and shared by members of the dental hygiene 
   occupation with respect to an emergent ideology of dental hygiene?

3. What are the claims made by members of the dental hygiene occupation with 
   respect to the occupation's professional status?

4. What are the barriers to the professionalization of the dental hygiene occupation? 
   What are the influencing factors?

5. To what extent are dental hygienists involved in personally and professionally 
   relevant activities related to professionalization which are outside of the work 
   setting?

6. How can the relationship between the occupations of dental hygiene and 
   dentistry be defined with respect to structure, hierarchy, organization, 
   occupational boundaries, power, gender, and professional roles?

7. Is the practice of dental hygiene "women's work" and how is this relevant to 
   dental hygiene's professional project?
8. What is the dental hygienist's professional self-concept? How does formal education influence the dental hygienist's professional self-concept? How does workplace socialization influence self-concept?

9. What are the perceptions of dental hygiene students with regard to the dental hygienist's professional role, and are these consistent with the perceptions of dental hygiene representatives?

The integrated conceptual framework of symbolic interactionism and conflict oriented neo-Marxist and neo-Weberian theories of professionalism provided the basis for studying the phenomena outlined in this study. Symbolic interactionism emphasizes that interaction is a two-way process, that is, a person displays behavior which is an outcome of how that person has understood the behavior of someone else. Interactionism attempts to understand the meaning and value that an individual attaches to experiences and objects which he/she encounters and how people make sense of their world, in this case, the world of dental hygiene. Through the use of an interactionist approach, the researcher explored and analyzed the perceptions and experiences of the participants in order to determine whether they have a common understanding and experience regarding the professionalization of dental hygiene. The incorporation of neo-Marxist and neo-Weberian perspectives of professions facilitated a critical analysis of the data from the standpoint of issues pertaining to power, inter/intra professional conflict, class, monopoly, functional autonomy, the division of labor, professional dominance, the gendered nature of professional work, and patriarchy. These concepts/issues of professionalism were central to the researcher's investigation of the "collective culture" of dental hygiene.
Assumptions

The researcher is a dental hygienist with twenty years experience in dental hygiene education and organized dental hygiene, (i.e., service in provincial, national, and international professional dental hygiene associations). Consequently, the researcher holds some preconceptions concerning the phenomena under study. In the tradition of qualitative research, any assumptions on the part of the researcher or assumptions which can be drawn from the literature must be identified at the outset of the study. The researcher's own experience and understanding of the study topic enriched the data that were collected. However, the investigator was aware of the potential for researcher bias and addressed this throughout the study. The researcher's assumptions about the occupation of dental hygiene were relevant to this study. These included:

1. In general, dental hygienists aspire to have greater autonomy and authority in their professional lives.

2. The occupation of dental hygiene lacks a paradigm to guide its practices. Based on the scholarship on professions, the absence of a prevailing ideology in dental hygiene hinders the occupation's rise to professional status (Dibble, 1962; Larson, 1977; Crawford, 1980).

3. Leaders in dental hygiene believe that professionalization occurs along a continuum and that the acquisition of certain "professional attributes" is critical to achieving professional status, for example, a distinct body of knowledge, baccalaureate degree as the entry level to practice, a code of ethics, and self-regulation (Darby, 1985; Cameron & Fales, 1985; Nielsen-Thompson, Sisty-LePeau, & Eldredge, 1988).
4. Sex-role stereotyping, gender discrimination and patriarchal power relations are critical factors in the evolution of dental hygiene's culture and organizational structure, in the day-to-day working relationships between dentists and dental hygienists, and in the division of labor in dentistry.

5. Formal professional socialization contributes to the transformation of student neophytes into professionals, although little is known about the effects of socialization in the dental hygiene workplace (Kraemer, 1986).

The dental hygiene occupation is engaged in a professionalization process to improve its occupational status and its position in the health care system, and to achieve self-regulation. Despite the fact that dental hygiene has acquired many of the attributes normally associated with a profession, this occupation has not yet succeeded in achieving full professional status. Leaders in dental hygiene continue to believe that the acquisition of certain attributes will transform dental hygiene from an occupation to a profession. However, almost no research has been carried out to determine and validate the philosophical and professional base of the discipline of dental hygiene, from the standpoint of its leadership and other members.

A necessary first step in articulating the culture of the occupation of dental hygiene is to study the views, beliefs, and perceptions of dental hygiene members concerning dental hygiene's structure, socialization factors, and inter-professional relationships. In this investigation of dental hygiene's professional status, qualitative methodologies such as in-person interviews and document analysis were used to study the perceptions of the subjects from their own point of view. Through a qualitative research approach, the totality of the phenomena under study can be described, uncovering previously unknown perceptions and meanings held by the participants. A qualitative research design was useful in this study because very little is known about the research topic, other than the assumptions which can
be drawn from the literature and the researcher's own experiences. The conceptual framework applied in this study, that is, an integration of symbolic interactionism, neo-Marxist and neo-Weberian theories of professions, allowed the researcher to explore and analyze the beliefs and experiences of the participants concerning the culture of dental hygiene.

**Conceptual Framework**

**Background**

The literature on the transformation of a novice to an expert, and an occupation to a profession, points to a few major alternative theoretical perspectives: structural-functionalisn, interpretivism (symbolic interactionism) and conflict paradigms. Early attribute and structural-functionalists' theorists of professions were criticized for ignoring power, authority and control issues in relation to professionalism. More contemporary conflict oriented theorists have developed conceptual and theoretical models that are concerned with matters of control and power among professions. On an individual basis, none of these theories appears to fully inform all aspects of this study. Most of them focus on the establishment of dominant professions and the means by which they are sustained in modern times. Few theories deal effectively with the transformation of a semi-profession to a profession, and gendered aspects of this transformation are neglected.

This study documents and analyzes the perceptions, beliefs, and experiences of representative members of the dental hygiene community in order to conceptualize the culture of dental hygiene, and to understand the professional project of this occupation. Issues of inter/intra occupational conflict, professional dominance, occupational jurisdiction, monopoly, power, and gender are central to this study. The conceptual framework selected for this study integrates symbolic interactionism (micro) with more
current conflict oriented neo-Marxist and neo-Weberian (macro) theories of professionalism.

Symbolic interactionism, a social psychological theory first articulated by George Herbert Mead (1934), emphasizes the more conscious aspects of human behavior and relates them to an individual's participation in group life. In addition, it is an "approach" to the study of human behavior and group life associated with the methodologies of qualitative research (Chenitz & Swanson, 1986). This theoretical perspective allowed the researcher to uncover the cognitions and hence the perceptions of "individual representatives" of the dental hygiene community regarding professional role identity, self-concept, and cultural knowledge. This was accomplished through the use of in-person interviews and document analysis. Tacit and explicit knowledge, and the lived experiences of the study participants, were explored in order to conceptualize the culture of dental hygiene from the perspective of the participants.

However, symbolic interactionism does not offer an explanatory framework for matters pertaining to group conflict and power struggles based on factors such as class or gender. Rather it focuses on negotiated (consensual) interactions between humans. The integration of neo-Marxist and neo-Weberian models into the conceptual framework for this study facilitates a critical analysis of the data from the standpoint of issues pertaining to power, conflict, class, monopoly, ideology, division of labor, professional dominance, and patriarchy. These concepts/issues of professionalism are central to the researcher's investigation of the "collective culture" of dental hygiene.

Dental hygiene's professional project has increased inter-occupational disputes which exist with dentistry. Dentistry, a male dominated profession, controls the work of dental hygiene, a primarily female dominated occupation. In addition to these occupational disputes, gender imbalances at the individual and group level contribute to growing battles of control, monopoly, patriarchal authority, and subordination. Dental hygiene's professional project is a struggle between occupations and between the sexes. The culture
of dental hygiene is in part directly related to its relationship with dentistry; the interactions between individual practitioners and professional organizations. In short, the conceptual framework for this study incorporates the tenets of symbolic interactionism to guide its examination of the perceptions and meanings held by individual dental hygienists. The interpretations of neo-Marxist and neo-Weberian theorists regarding professionalism and the transformation to professional status (including barriers and enabling factors) are included in order to gain a greater understanding of the occupational culture of dental hygiene.

Structural-functionalism and attribute theory are unsuitable conceptual frameworks for this study because they pay little attention to conflict which may arise between individuals, or the fact that interactions are often negotiated. They also fail to acknowledge that individual roles are entrenched in power and class structures, or that professionals as individuals may not agree on what constitutes a professional role, or that gender imbalances may act as a barrier to the achievement of professional status by an occupation. The structural-functional theory of professionalization assumes a positivist research methodology in which everything is seen to have a cause. This approach lends itself to empirical, “objective” research employing such methods as experimentation, observation, and survey research. These research methodologies are primarily quantitative in nature. Structural functional theorists argue that a society’s cultural rules determine or guide the similar behavior of its members and that norms apply to roles or positions rather than to individuals themselves. This conceptual approach further posits that socialization results in an agreement among people about appropriate behavior and thoughts in a given social setting, and that the transition from a novice to expert is a smooth process, devoid of conflict (Jones, 1985).

Conversely, proponents of symbolic interactionism assert that social life and professional life are reflected in the interactions of humans through a process of interpretation and negotiation. Contrary to structuralists, who claim that all behavior is
learned or determined, interactionists assert that behaviors and thought arise from the way in which individuals define the situations they encounter. Rather than human personality evolving in a passive manner, humans play an active role in the creation of their social selves. Interactionists acknowledge the role of previous experience in the development of cognitions and behaviors. This conceptual approach embraces research methodologies which are qualitative in nature: unstructured, subjective techniques permit the discovery of themes. A symbolic interactionist perspective allows the researcher to study, conceptualize, and understand the behavior and thoughts of individuals and groups in interaction, and to understand unresolved or emerging social problems (Chenitz & Swanson, 1986). The analysis of interaction includes individuals' self-definitions and shared meaning. Charon (1989) states:

The central principle of symbolic interactionism is that we can understand what is going on only if we understand what the actors themselves believe about their world. The actor lives and knows his or her world. It is imperative to understand what the actors know, see what they see, understand what they understand. We must understand their vocabulary, their ways of looking and their sense of what is important. What the researcher must do is interact with the actors, observe and partake in their activities, conduct formal interviews, and try to reconstruct their reality. (p. 182)

Using a symbolic interactionist perspective, the researcher must "take the role of the other" and understand life from the participants' perspective.

Based on the views of symbolic interactionists, social life is reflected in the interactions of humans (Mead, 1934; Blumer, 1969; Meltzer, 1972; Rose, 1980; Charon, 1989; Matsueda, 1992). The behaviors of human beings are the product of how they
interpret the world around them. Contrary to structural-functionalists, who claim that all behavior is learned or determined, interactionists assert that appropriate behaviors are selected based on how individuals define the situations they encounter. Symbolic interactionism stresses that interaction is a two-way interpretive process. Simply stated, a person displays behavior which is a result of how that individual has understood the behavior of someone else. At the core of symbolic interaction is the concept of "self" (Benson & Hughes, 1983). An individual's self image is a product of the way others perceive them. Socialization is a result of the interpretive process, the assignment of meanings between people. Individuals communicate with one another through the use of symbols such as language, dress, and physical gestures. Rather than human personality evolving in a passive manner, humans play an active role in the creation of their social selves (Jones, 1985).

The theory of symbolic interactionism posits that culture is created by the interaction of humans over time. Charon (1989) states that "culture means the "consensus" of the group, the agreements, shared understandings, shared language and knowledge, and rules that are supposed to govern action" (p. 165). Culture, then, is (1) a shared perspective through which individuals in interaction define reality, and (2) a generalized other through which individuals in interaction control their acts. Ideas, rules, and the actions of individuals are negotiated through interaction by members of the group. Humans, through the use of symbols, communicate with other humans. Symbols are transmitted through gestures, motions, objects, and most often, language. The meaning and value of symbols are culturally determined (Riehl-Sisca, 1989).

The conceptual framework of symbolic interactionism combined with neo-Marxist and neo-Weberian models of professionalization guide this study of the culture of dental hygiene in its exploration of the perceptions and meanings held by the participants. Language is the primary mode through which these perceptions came to be understood by the investigator. The ideas of symbolic interactionism contribute to the conduct of in-
person interviews and to the analysis of data collected from interviews. In terms of study methodology, qualitative research methods normally associated with symbolic interactionism are in keeping with the purpose of this study, that is, to understand the various facets of the dental hygiene occupation and its members from the participants' perspective. Specifically, the researcher gathered data relevant to participants' professional self-image: experiences that have helped to shape these images: interactions with dental hygienists, dentists, clients and others in the professional work environment: and perceptions regarding the culture of dental hygiene. Analysis of the data included the application of symbolic interactionism in understanding the symbolic meaning of perceptions held by participants, and the importance of interactions with others in shaping the culture of dental hygiene. Concepts related to issues of power, conflict, professional monopoly, and gender, espoused by neo-Marxist and neo-Weberian theorists were employed to analyze the occupational status and culture of dental hygiene. The following sections will delineate the basic premises, assumptions, and concepts of symbolic interactionism and selected neo-Marxist and neo-Weberian theories that comprise the conceptual framework for this study.

Premises/Assumptions and Concepts of Symbolic Interactionism

There are slight conceptual variations among symbolic interactionists regarding the basic themes of this model, but most often the writings are similar. Mead's (1934) contribution to the theory of symbolic interactionism is his identification of the process whereby a sense of self develops. He postulated a social process (primary socialization) in which a human being develops a mind and a self (Chenitz & Swanson, 1986). Through this interactive process, an individual "takes the role of another". The capacity to see one's self from the perspective of another enables a person to achieve a sense of "self". A self-concept is learned during childhood and continues through human interaction. The notion
of self-concept is relevant to this study as participants were studied from the standpoint of their perceptions about dental hygiene and role identity. Through formal and informal (secondary) socialization, dental hygienists develop a professional self-concept. This self-concept is largely influenced by role modeling which takes place between teachers and students during formal education, and through interactions with colleagues in the workplace. Over time, such interactions evolve into the culture of a particular group. Mead used the phrase "generalized other" to describe the shared culture of a group and a shared body of rules (Charon, 1989). Participants in this study were asked to discuss factors which contributed to the development of their professional self-concepts.

Blumer (1969) further elaborated on the concepts of interactionism and postulated three basic premises of symbolic interactionism. First, that "human beings act toward things on the basis of the meanings that the things have for them" (Blumer, 1969, p. 2). These things are symbols of objects, other human beings, the activities of others and situations or a combination of these. People do not respond to things, but to their meanings. Second, "meaning of such things is derived from, or arise out of, the social interaction that one has with one's fellows" (Blumer, 1969, p. 2). Spradley (1980) suggests that cultural norms, as a shared system of meanings, are learned, defined, revised and maintained as people interact with one another. This suggestion supports an assumption by the investigator that the culture of dental hygiene has been largely shaped and defined through the interactions of leaders (educators and individuals holding leadership positions in dental hygiene associations and licencing bodies) with one another, with dentists, other health professionals, and with government. A third premise of symbolic interactionism is that "meanings are handled in, and modified through, an interpretive process used by the person dealing with the things he encounters" (Blumer, 1969, p. 2). In other words, individuals within a group, such as dental hygienists, normally use their cultural knowledge to assess and make sense of a situation. They draw on their cultural awareness and biases to give meaning to and interpret situations, and to
provide guidance or direction for taking action. This study of the occupation of dental hygiene drew on the perceptions of the participants whose experiences and interactions have contributed to the development of the culture of this occupation. Blumer concludes that the ability of a human to hold a concept of self and to interact with self and others is the basis for the formulation of meaning and experience in the world. The ability of humans to interact and communicate with one another using a common language provides a mechanism by which meanings can be shared.

Rose (1980) provides a comprehensive framework for the analytic assumptions of symbolic interaction. Five analytic assumptions emerge from Rose's conception of symbolic interaction theory which were useful for conceptualizing and guiding the research questions in this study.

Assumption 1: "Humans live in a symbolic environment as well as a physical environment and can be stimulated to act by symbols as well as by physical stimuli" (Riehl-Sisca, 1989, p. 387). A symbol is a social object used for intra- or inter-communication purposes. It is an object intentionally used to represent something else. Without intention, an individual may communicate but this is not symbolic communication. Symbols may be words, or acts, or objects. Human beings are unique in that they have the capacity to think and use complex language. Language is a special kind of symbol. It is made up of words: each word has meaning alone and also has meaning when it is combined with others in a formalized way. Words are actually categories, used to identify and describe a class of objects that are recognized by humans (Charon, 1989). Human beings have the ability to learn symbols, their meanings, and values from those with whom they interact. Such meanings and values form part of a group's culture.

The central focus of this study is the examination of the meanings, values, and symbols that emerged from in-person interviews with study participants. The data (words and language) form the basis for understanding the cultural elements of the dental hygiene
occupation from the perspective of some of its members. The investigator analyzed the language used by the participants through a qualitative research coding process in order to search for common perceptual themes which arose from interviews and document analysis. Interview questions were based on the specific research questions that guided this study. Questions pertaining to the occupational status of dental hygiene, the professionalization of dental hygiene, self-regulation, independent practice, inter-occupational disputes, socialization, occupational boundaries, gender, relations with clients, and dental hygienists' self-concept were explored.

Assumption 2: "Through symbols, people have the capacity to stimulate others in ways other than those in which they themselves are stimulated" (Riehl-Sisca, 1989, p. 387). This assumption is related to the importance of the self-concept and role-taking. Taking the role of another person is fundamental to the development of the self and is necessary for acquiring and using symbols (Charon, 1989). When we take the role of the other we imagine, even visualize, the other's perspective. This is accomplished by observing and listening to the other person. As others act, we imagine ourselves symbolically as they are and we come to share part of their meaning. The self serves as the basis from which a person makes judgments and takes actions in any given situation. Self-concept refers to the sum of an individual's cognitions and feelings with respect to himself or herself as an object (Rosenberg, 1979). Self as an object is usually referred to as the "me" and another part of self is termed the "I" (Mead, 1934). The "me" is the social self, that aspect of self that others interact with, direct, judge, identify, and analyze. The "I" component of one's self is that part that is impulsive, spontaneous, and not deliberately used by the individual (Mead, 1934). The actions of an individual are usually the result of the internal negotiations between "I" and "me". The significance of role-taking and self in this research is that an individual's perceptions are shaped through interactions with others, and thoughts and actions are influenced by role expectations and role-taking. During
professional socialization, dental hygiene students develop a professional identity which is partly shaped through modeling by teachers and interactions with peers. The researcher examined the meaning of the professional role of the dental hygienist by exploring the influence of formal education on the formulation of a professional self-concept.

Assumption 3: "Through communication of symbols, people can learn huge numbers of meanings and values - and hence ways of acting - from other people" (Riehl-Sisca, 1989, p. 387). Most behavior is learned behavior, specifically learned through symbolic interactions. Rose (1980) claims that humans have a culture, a sophisticated set of meanings and values shared by members which guides their behavior. Cultures are comprised of subcultures. By learning cultural norms and symbols, humans are most often able to predict each other's behavior or direct their own behavior according to the behavior of others. However, cultural meanings can change with time as a result of continuous interactions between individuals and cultures, as individuals express values and meanings that are different from prevailing cultural norms. This assumption supports the notion of a "culture of dental hygiene" in which members communicate symbolically to direct their own behaviors and thoughts and to gauge their behavior towards each other. The researcher explored this culture by using qualitative research methodologies to expose the significant symbols of this culture and their meaning. These symbols were derived from responses to the research questions and analyzed primarily through the interpretation of language. Examining these symbols was pivotal to conceptualizing the culture of dental hygiene.

Assumption 4: "The symbols - and the meanings and values to which they refer - do not occur in isolated bits, but often in clusters, sometimes large and complex" (Riehl-Sisca, 1989, p. 387). An individual defines himself/herself ("me") as well as other objects, actions, and characteristics. This assumption is associated with the complexity of
behavior; it does not merely occur once in a given situation. Behavior is directly involved with role-taking and enactment. Berne (1964) claims that people generally accept behavior that is associated with particular roles and engage in role-playing to meet certain cultural expectations. Individuals develop organized sets of attitudes and values through continuous ritualized actions within their lived experience (Matsueda, 1992). Although many meanings are not shared in explicit ways with members of a group, implicit understandings permit interaction to occur (Charon, 1989). This study ascertained whether or not representatives of dental hygiene's membership were consistent in their perceptions of the culture and status of dental hygiene. The researcher examined the complexity of the dental hygiene culture through the use of sensitizing concepts such as occupational closure and gender discrimination to get at the meanings (both tacit and explicit) shared by members.

Assumption 5: "Thinking is the process by which possible symbolic solutions and other future courses of action are examined, assessed for their relative advantages and disadvantages in terms of the values of the individual, and one of them chosen for action" (Riehl-Sisca, 1989, p. 387). Thinking is a symbolic process in which the individual takes his/her own role to visualize herself/himself in various possible situations, makes an assessment of the situation, followed by a decision. Both the past and the future are considered during this reflexive thinking process. Because humans have the capacity for symbolic language, they are able to contemplate many action plans before deciding on a specific course of action. Schroeder (1981) states that thinking and subsequent problem-solving are related to the perceived values of the individual. The ability to think allows the individual to reflect upon one’s own sense of self, take the perspective of others, and contemplate meanings through symbolic language (Charon, 1989; Matsueda, 1992). In this study the role of thinking and reflection were critical aspects of the investigation and the analysis of the perceptions of the study participants. Based on this aspect of symbolic
interactionism, participants drew on past and present experiences to express their perceptions of the culture of dental hygiene. They considered cognitions and experiences arising from their student lives, their working lives, and their interactions with others, in order to define their cultural perceptions of dental hygiene. The totality of their professional experiences was explored.

**Neo-Marxist and Neo-Weberian Models of Professionalism**

The concepts contained within neo-Marxist and neo-Weberian models of professionalism facilitated the analysis of the data gathered in this study. The neo-Weberian model of professions focuses on occupational closure strategies, while the neo-Marxist approach is directed at the structural and historical dimensions of professionalization. These conflict perspectives offer theoretical insights into issues of professional dominance, occupational subordination, the sexual division of labor, jurisdictional monopoly, and gendered professional projects (see Appendix A for further information about the meaning of these terms). Each of these issues is relevant to the study of dental hygiene as an occupation striving to transform itself from a semi-profession to a profession, while currently under the power and control of the predominantly male profession of dentistry. Inter-occupational conflict within a patriarchal structure is a primary feature of the present relationship between dental hygiene and dentistry. Neo-Weberian concepts depict professionalization as a strategy of occupational control. Freidson (1970) argues that a profession is an occupation which has secured a legal right to control its own work and is independent of other occupations. It does so through the protection and support of a society which values its work and the service it provides. In Freidson's view, semi-professions fail to achieve full autonomy with respect to their work and are subordinate to dominant professions. For example, dentistry is able to maintain a
position of dominance and power over dental hygiene by its legal position in the health care division of labor and its monopolization of the market for dental services.

Parry and Parry's (1976) examination of the professionalization of medicine revealed that class and gender dimensions were central to the notion of "professional closure" in medicine, that is, predominantly male and upper-middle class. Parkin (1979) created a model of occupational closure strategies that describes the methods by which professions control and dominate subordinate occupations. All closure strategies are concerned with controlling the supply of entrants to an occupation, occupational regulation, monopoly of skills and knowledge, and establishing a hierarchy within a division of labor. Dominant professional groups employ exclusion and demarcation strategies to establish jurisdictional boundaries, govern subordinate occupations, and establish a monopoly of skills. Semi-professional groups use inclusionary strategies in order to establish their position within the division of labor, and resist the demarcationary strategies of dominant groups.

In the case of dentistry and dental hygiene in Canada, there are currently many inter-occupational disputes taking place concerning the regulation of dental hygiene, including disagreement about requirements for supervision and the scope of dental hygiene practice. Traditional relationships between dental hygiene and dentistry have become unacceptable to dental hygiene as a desire for more egalitarian relations has developed. Provincial dental hygiene associations are seeking self-regulation (including less restrictive supervision) while organized dentistry is fiercely opposed to this change. Neo-Weberian concepts pertaining to closure theory were useful in this study for the analysis of participants' perceptions of the relationship between dentistry and dental hygiene, dental hygiene's occupational status, position within the dental division of labor, and professionalization.

Extending the tenets of occupational closure strategies, Witz (1992) claims that demarcationary strategies are essential in understanding how inequitable gender relations
are established and maintained within an occupational hierarchy in a labor market. Witz states:

Gendered strategies of demarcationary closure describe processes of inter-occupational control concerned with the creation and control of boundaries between gendered occupations in a division of labor. They turn not upon the exclusion, but upon the encirclement of women within a related but distinct sphere of competence in an occupational division of labor and, in addition, their possible (indeed probable) subordination to male-dominated occupations. The concept of a gendered strategy of demarcationary closure directs attention to the possibility that the creation and control of occupational boundaries and inter-occupational relations may be crucially mediated by patriarchal power relations. (p. 47-48)

Witz's concept of gender and demarcation strategies is useful in understanding the creation of the dental hygiene occupation and the way in which dentistry established dental hygiene as a female occupation (with distinct occupational boundaries) subordinate to dentistry, a predominantly male profession. Recently, provincial dental hygiene organizations have begun to employ dual closure strategies in response to dentistry's dominance and restrictive control. These strategies involve "the upwards countervailing exercise of power in the form of resistance on the part of subordinate occupational groups... but also seek to consolidate their own position within a division of labor by employing exclusionary strategies themselves" (Witz, 1992, p. 48). In Witz's view, "female professional projects" involve the use of gendered strategies of dual closure whereby an occupational group of women challenges a male monopoly over competence. These strategies are gendered because the members of the occupations are gendered, and gendered criteria of inclusion or exclusion are features of closure strategies. Dental hygiene's professional project is both a
gendered struggle against the patriarchy, power and dominance of dentistry, and an effort to attain some degree of functional autonomy and status within the health care division of labor.

The focus of the neo-Marxist approach to the study of professions is related to the structural and historical aspects of professionalism. Neo-Marxist theorists emphasize the importance of the relationship between professions, capitalism, and class structure (Johnson, 1972; Larson, 1977; Navarro, 1978). Professionals are located within the middle class. Johnson (1972) defines professionalism as colleague control over work functions. Professionalism occurs when the work of an occupation satisfies the global purposes of capital which include control, surveillance and reproduction of labor power. In this view, dentistry can be seen as having created, established, and developed the labor force which provides oral health services in the marketplace. Applying Johnson's model of professionalism, dentistry governs and controls the work of subordinate occupations such as dental hygiene and dental assisting. It prescribes and regulates the educational requirements of members, their scope of practice, the conditions under which their work occurs, and the need for their services. Dentistry also dictates the number of entrants into the occupations of dental hygiene and dental assisting. Dentistry's monopoly with respect to economic security and market control would be jeopardized if the cost of dental hygiene services to the public was increased, if dental hygiene salaries were significantly higher, or if dental hygienists were able to provide services outside of the monopoly which dentistry presently holds. Johnson's neo-Marxist interpretation of the study of professions will assist the researcher in data analysis relative to both dental hygiene's role in the social division of labor, that is, the reproduction of capitalist culture, and dentistry's dominance over dental hygiene in the labor market.

Larson's (1977) work on the relation between professional projects and capitalist institutions was useful in this study for determining whether or not dental hygiene's professional project is linked to the creation of a professional market and how the
construction of a formal knowledge base in dental hygiene is tied to market power. These two key elements are secured within the historical web of competitive capitalism (Witz, 1992). Further, Abbott (1988) argues that the ability of an occupation to sustain its jurisdiction or claim a jurisdiction is partly associated with the prestige and power of its knowledge base, and that the cultural legitimacy of a profession's work is tied to occupational jurisdiction. Many authors both within and outside of dental hygiene, have pointed to the necessity of the development of a dental hygiene theory base to substantiate dental hygiene's claim to professional status (Darby, 1985; Bowen, 1988, 1990; Biller-Karlsson, 1988; Dickoff & James, 1988; Stamm, 1982). Larson's thesis is that "the core of the professional project is an attempt to secure a structural linkage between education and occupation: between knowledge in the form of the negotiation of cognitive exclusiveness, and power in the form of a market monopoly" (Witz, 1992, p. 56). Professions seek state support for their projects on the basis of their members possessing superior competence.

The contribution of neo-Marxist writers such as Johnson (1972) and Larson (1977) to the literature on professions has been to emphasize the importance of studying professions within an analysis of capitalist social, economic, and political relations. Professionalization is a part of a larger system of structural and historical elements. The requirement of profit under capitalism results in the exploitation of a major portion of the population (workers). Health is perceived as a commodity in the market place and the delivery of health services is directed by the need for efficiency and profit. By applying a neo-Marxist framework to the study of professions, physicians and dentists can be seen as members of the upper middle class who exploit the skills of a subordinate class of workers (nurses and dental hygienists) in order to profit from inexpensive labor and the provision of controlled health services. Part of dentistry's original rationale for dental hygiene's development was that hygienists could provide services equal in quality to those provided by dentists at lower unit cost (Health & Welfare Canada, 1988).
Contemporary feminists have extended this neo-Marxist framework to examine sexual divisions in capitalist society. This extension adds a gendered dimension to the class concept of professions. Neo-Marxist feminists argue that within the health care division of labor, women are forced by male dominated professions to assume subordinate roles in a hierarchy and provide inexpensive labor. They make up the bulk of the labor force and have little control over their work. The nursing and dental hygiene occupations are prime examples of the patriarchal power and authority exercised by the medical and dental professions. A neo-Marxist analytical framework has been applied in this study to uncover the gendered dimensions of dental hygiene's professionalism, and in particular, the gendered nature of relations of dominance and subordination (patriarchy) between dentists and dental hygienists. An important question to consider in this analysis pertains to the impact of patriarchal structures in dentistry on the development of dental hygiene's culture, the work of dental hygienists, inter-occupational relations, and dental hygiene's professionalization.

Summary

In this research, the selected conceptual framework of symbolic interactionism, combined with neo-Weberian and neo-Marxist theories of professionalism, allowed the researcher to study the perceptions of the participants regarding the culture and status of dental hygiene as an occupation, and then situate these perceptions within a broader understanding of the factors which contribute to this culture and its professionalization. Symbolic interactionism acknowledges the importance of an individual's cognitions and perceptions developed through interactions with others and with the self by means of reflection. It provided a model for the systematic study of the perceptions of the participants to determine the congruency of these perceptions in relation to the emerging culture and professionalization of dental hygiene. Neo-Marxist and neo-Weberian concepts
of professionalism draw upon important issues in studying professionalism and the transformation of semi-professions to professions. Such issues include patriarchy, subordination, occupational closure, and division of labor. Using a qualitative research paradigm, the investigator explored questions of professional dominance, role identity, gender, and inter- and intra- professional conflicts to uncover both the impediments and enabling factors related to dental hygiene's professional project, and to conceptualize the culture of dental hygiene. The research process focused on the qualitative meaning of language and symbols examined through in-person interviews and content analysis of selected documents.

Chapter Two provides a review of the literature on professions including the general research on theories of professions, constructs and issues of professionalism, and research in dental hygiene. The design and methodology of the study are described in Chapter Three. This chapter includes characteristics of the sample, recruitment techniques, data collection methods, procedures for data analysis, ethical considerations, and limitations of the study. Chapters Four and Five discuss the findings of the study (the core theme and major themes) as well as provide background information on the participants. In the final chapter, Chapter Six, the findings are analyzed in light of a review of the literature and the study's conceptual framework. Recommendations for further research are identified.
CHAPTER TWO

REVIEW OF THE LITERATURE

A long standing debate between researchers who employ quantitative methods and those who use qualitative strategies of inquiry concerns the use of the literature review. For investigators working within a quantitative research paradigm, a review of the literature prior to the onset of a study serves several purposes. First, it allows the researcher to identify previous research in an area and to discover gaps in understanding. Second, it provides theoretical and conceptual frameworks that may be used to direct a study and to interpret its findings. Third, a literature review assists the investigator in distinguishing important variables for study and suggests relationships between them (Strauss & Corbin, 1990). In contrast, in grounded theory research, the literature review is considered to be a source of data and the purpose of the review alters over the course of a study. At the beginning of a project, the literature is reviewed to identify the scope, range, intent, and type of research that has been carried out. The ultimate goal of the review is to establish the study's purpose, background, and importance (Chenitz & Swanson, 1986; Morse, 1989). As grounded theory is based on a discovery model of theory development, the literature review is an ongoing process and continues through to the end of data analysis. For the purposes of this study, a review of the literature on professions provides the context for the study and its importance. The literature was reviewed continually throughout the investigation to ensure that no data were overlooked.

The study of professions and the concepts of professionalism/professionalization encompass a massive body of literature. Social scientists and others have been studying these phenomena for decades. The literature which forms the basis of this review includes an overview of the development of professions, followed by consideration of early works and more contemporary theories of professions, and then moves to a critique of specific
issues/constructs of professionalism within the context of health care. Finally, the notion of professionalization is considered with respect to the occupational development of dental hygiene, its relationship to dentistry, and research to date in this area. The literature which has been selected for review is drawn primarily from studies in sociology, in the health professions, and in feminist scholarship.

The Development of Professions

Although the professions date back to ancient and medieval times, the study of professions is a phenomenon of the twentieth century. The expression of modern professions as they are known today can be traced to the nineteenth century. Within the past century, Britain witnessed the consolidation of surgeons and physicians with apothecaries and the ascent of the lower branch of the legal profession (solicitors), while North America observed the growth of university-based professional programs, the victories of regular medicine over its irregular branches, and a proliferation of aspiring occupational groups (Abbott, 1988).

The study of professions has been a focus of the social sciences for several decades. Sociologists and historians have devoted most of their scholarly efforts to examining the concepts of professionalism and professionalization, usually in a case by case analysis of occupational groups. Most authors purport that professions evolve through a sequence of stages referred to as professionalization, and that the outcome of this process is professionalism. The concept of professionalism refers to a form of occupational control and solidarity, the systemization of beliefs, and a source of meaning in work (Starr, 1982). A substantial portion of the literature on professions is preoccupied with identifying and analyzing the organizational form and structure of occupational groups and the common elements of professions that are presumed to contribute to the well being
of society. This literature is less concerned with defining and comprehending the actual nature of professional life and work.

The development of professions has been studied in association with certain historical periods and phenomena (Abel, 1976; Bledstein, 1976; Larson, 1977; Starr, 1982; Prest, 1984; Abbott, 1988). The majority of historical analyses describe two periods in the growth of professionalism, pre-industrial and post-industrial. Between the sixteenth and eighteenth centuries most professions had an aristocratic orientation. Divinity, medicine and law have been described as the oldest professions in England and Europe. Their members came from the ruling elite of a patriarchal society (Larson, 1977). Reader (1966) emphasizes the gentlemanly character of professionals in this era. Women were excluded from entrance as members, thereby establishing a tradition of male domination in the professions. A gendered notion of professions prevailed throughout pre-industrial times and continued into the next phase of professionalism.

Professions resembled guilds. Although it was considered desirable for a clergyman, barrister or physician to have specific knowledge or skills, it was assumed that a liberal education, combined with professional apprenticeship, was sufficient to carry out the work of a professional. In short, in pre-industrial times professions were relatively insignificant in the organization of work. Professionals simply held a high position in a system of social hierarchy. They functioned as intellectuals and demonstrated little evidence that they were contributing to the welfare of society.

With the advent of the Industrial Revolution in the nineteenth century, professions previously associated with "status professionalism" were transformed by "occupational professionalism" (Prest, 1984). This development in the history of professions was marked by distinct specialization of knowledge and skill and dedication to public service in lieu of private gain. A transition occurred whereby professional claims resting primarily on high social status were surpassed by claims to economic security and professional standing
based on knowledge and competence. However, ascribed social standing remained an important feature in the evolution of modern professions.

The effects of the "Great Transformation" or the industrialization of society in nineteenth century England and America offered opportunities for professions to modernize. Improved standards of living, industrial rationalization of work, growth of corporations and bureaucracy, and the growing importance of science and technology contributed to "professional projects" directed at market monopoly and social status (Larson, 1977). The last decades of the nineteenth century witnessed a growth of higher education in response to demands of new service markets and an increasing number of professions. However, in the U.S.A., Jacksonian politics were anti-intellectual and anti-aristocratic and led to a quality of professional education which was far below the standards set earlier by European professional elites. Laissez-faire economic development in the United States facilitated a proliferation of new middle-class occupational groups and professional competition.

The early part of the twentieth century was marked by a movement toward corporate capitalism and the creation of new markets for professional services (Larson, 1977). The rationality of science, as a world view, led to a new structural and ideological context of professionalism. Professional education became institutionalized, bureaucratic organizations provided the foundation for increasing professionalization, and the ideology of professional efficacy grew and empowered professions. Professional autonomy and scientific expertise became the hallmarks of the modern professions. The primary mechanism for professional advancement in the twentieth century was the ability of an occupational group to claim esoteric and identifiable skills, that is, to establish and control a cognitive and technical base. Expertise resulted in social and economic rewards and public recognition. Modern professions were consolidated by the integration of teaching and research in the modern university. Professions were legitimated on the basis of scientific, rational claims to a knowledge base and expertise not held by the average person. Society
willingly became dependent on expert professional service as a means of improving quality of life.

In short, the growth of modern professions is a phenomenon of the past 100 years. Early pre-industrial professions were characterized by ascribed professional status related to a liberal education, high social standing, and aristocratic patronage. Pre-industrial professions were transformed by several features of capitalism including an increase in scientific rational knowledge, a growth in urbanization, a rise in bureaucratization and the organization of work, and the establishment of a market economy for professional services. Professional status had to be achieved by means of specialized education in technical skills and the use of these skills in professional work. Professions were seen as making a unique contribution to society through the embodiment of scientific expertise which was applied to all aspects of human living. In return for this contribution, established professions were rewarded and protected by the state when they were granted self-regulatory powers, and by public recognition and acceptance of professional power and authority.

One feature of professionalism which has been neglected in most studies of professions is the relationship between gender and the organization and structure of professions and professional work. The gendered nature of the division of labor within professions has only recently come under sociological investigation (Willis. 1989: Witz. 1992). Its study is of particular importance in examining and understanding women's professional projects, specifically, the process of professionalization involved in the transformation of female dominated semi-professions to professional status. The aim of the professional project is to secure a structural link between education and occupation by means of legalistic and credentialist strategies. Witz (1992) states that as modern professions developed in the late nineteenth and early twentieth centuries, the institutionalization of male power played a critical role in limiting and subordinating women's participation in the labour market. Women were relegated to positions in the work force defined and controlled by men and associated with low wages and low levels of
prestige, for example, secretarial employment, labor intense factory jobs, and school teaching. Within health occupations, women became established in areas such as occupational therapy, midwifery, nursing and dental hygiene and were subordinate to male dominated professions such as medicine and dentistry (Motley, 1986; Willis, 1989; Witz, 1992).

The study of gender relations in the work force and the impact of a patriarchal society on feminized professions is a new area of research in the social sciences, particularly within feminist scholarship. Such research contributes to an understanding of gender and professionalization at individual and organizational levels. That is, it offers insights into the subordination and domination of women by men in the professional workplace, and increases our understanding of the gendered aspects of the structure and organization of male dominated professions. Scholarly work of this type contributes to our knowledge of the effects of gender on professionalization, and in particular its impact on women's professional projects.

Theories of Professions

The theoretical framework for the study of professionalism and the transformation of semi-professions to professions is broad-based and varied - almost eclectic in nature. While some theories and/or models are functionalist, structural and ahistorical in approach, others are conflict oriented and view history as an essential component in understanding the system of professions. Medicine is often identified as the paradigmatic model for the study of professionalism and is heralded as the profession after which most aspiring occupations attempt to fashion themselves (Larson, 1977; Starr, 1982; Blishen, 1991). The profession of medicine is viewed as a powerful institution of social control characterized by autonomy, authority and sovereignty, and the reproduction of labor power (Zola, 1986; Willis, 1989). Medicine mediates the relationship between an individual's health and the state. The
professionalization of medicine has been studied from a number of different theoretical perspectives, yet no occupation to date has successfully applied this knowledge to achieve comparable power and authority or otherwise attain equal status.

The scholarship on professions is extensive. However, it fails to provide an integrated framework for explaining and predicting the successful professional transformation of some occupations and not others. Another critical element in the study of modern professions that has been neglected until recently, is the impact of gender on occupational development and professional projects. The literature selected for inclusion in this review is comprised of classic and contemporary literature on professions, and references to such writings in health care.

Early Theories

Two theoretical frameworks dominated early studies of professions during the late 1950s and 1960s, that is, attribute and functionalist approaches. The first approach, which continues to dominate the health professions literature, involves the identification of specific attributes or traits which are deemed characteristic of professions (Freidson, 1970; Turner, 1987; Willis, 1989; Blishen, 1991; Witz, 1992). Sociologists have discussed and debated criteria, lists, definitions and traits of a profession, all of which have resulted in attribute theories that closely resemble one another. Essentially, the basic tenet of this approach is that the professional status of an occupational group is dependent on the satisfactory acquisition of particular attributes. Attribute theory is employed as a strategy by occupational groups aspiring to professional status, such as nursing and dental hygiene (Lysaught, 1978; Bernhard & Walsh, 1981; Darby, 1985; Cameron & Fales, 1985; Brown, 1987; Nielsen-Thompson, Sisty-LePeau, & Eldredge, 1988; Chaska, 1990).

Greenwood (1957) states that the distinguishing features of a profession include: (a) the use of systematic theory, (b) the demonstration of authority, (c) community
sanction, (d) ethical codes of behavior, and (e) group culture. Millerson (1964) adds that a profession: (a) develops specialized training and education, (b) tests the competence of its members by formal examinations, (c) develops a professional organization, and (d) has an altruistic service orientation. Goode (1960) extends the trait approach by arguing that occupations are positioned at some point along a continuum of professionalism. The continuum is composed of common traits derived from definitions of a profession. Goode argues that two core characteristics associated with professions are a service orientation and lengthy specialized education in a body of abstract knowledge. As occupations move forward along the process of professionalization, they procure a number of derived traits associated with standards of education, socialization, licensure, self-regulation, and occupational prestige and income.

Despite the widespread use of the attribute or trait approach, it has received much criticism. Basically, it is descriptive and arose to describe the ideal type of a profession. It has limited analytical value. First, it fails to come to terms with the way in which professions acquire autonomy and independence, that is, their power to manipulate and control their clients and markets (Blishen, 1991). Second, the attempt to define the traits of a profession involves a unilinear view of occupational histories in which there is an end-state to which a profession is directed. These unilinear theories of professionalism neglect the specific historical contexts within which professions develop in different societies. Due to national differences, there may be no identifiable historical trajectory for professions (Turner, 1987). Third, trait theory seldom includes any consideration of the general social conditions of professionalization (Johnson, 1972). Issues such as the relationship of class and gender to professions are neglected within this framework. Finally, it fails to explain why some occupations that acquire specific attributes are unsuccessful at achieving professional status. For example, although the occupation of dental hygiene has assumed, or is in the process of acquiring, many of the traits associated with a profession, it has not achieved full professional status (Smith, 1991).
Roth (1974), a major opponent of attribute theory, proposes that the study of professions must have an historical perspective and that attribute theory fails to place professions within any historical context. He argues that the study of professional traits only focuses on an end product, a list of characteristics which depicts the ideal professions. Roth asserts that historical study, in contrast to other approaches, emphasizes the work performed by professions. He claims that the power held by a particular occupation is not dependent on its knowledge base, but is related to historical occurrences and power distribution. From an historical perspective, the professionalization process would be viewed as a lengthy course of negotiation. By studying the growth of established professions, certain conditions, events, and circumstances can be documented to examine the process of achieving professionalism. In Roth's view, this process allows professions to have a monopoly over their services, and to avoid being accountable to the public for their actions. Roth questions whether codes of ethics alone have the power to ensure that all professionals behave ethically. Today, for example, malpractice suits against professionals are common in the United States, and to a lesser extent in Canada. Although professionals may subscribe to a code of ethics, this is no guarantee that they will actually conform. Johnson (1972) and Larson (1977) have also challenged the assumption that professionalization is a process without historical foundation by arguing that an increased involvement of the state and rise of bureaucratic practice reshaped modern professions.

A second closely related theoretical approach to studying professionalism is structural-functionalist theory which suggests that professionalization is functionally important for social order (Parsons, 1951; Turner, 1987). This theory is more abstract than the trait approach and assumes a greater degree of explanatory intent. It emphasizes two factors: modern professions are considered to be service occupations which apply a systematic body of knowledge to solve problems and these solutions are important in terms of society's values. Functionalism attempts to explain the position and functioning of professions in society. Functionalist theorists suggest that social control of a professional
member's work is left to individual self-control. Self-control is accomplished by means of a long socialization process and acculturation within the sub-culture of a profession. This results in the development of the requisite professional skills and a commitment to the values and norms of a particular profession.

Structural-functional assumptions have also been criticized. Johnson (1972) argues that functionalism ignores the consequences of power relations between a professional and a client. Professionals are viewed as imposing both definitions of needs and manner of service delivery on consumers, rather than serving identified social needs. The functionalist approach does not provide definitions of professions, but rather specifies the characteristics of a peculiar institutionalized form of occupational control. Pue (1990) states that, within the structural functionalist paradigm, professions are excused from the normal principles of capitalism or social democracy in favor of arrangements which support the notion that service, and not economic gain, is part of professional ideology. This perspective serves to rationalize the privileged position in society that professions enjoy.

In summary, two related approaches dominated the study of professions in the first part of the twentieth century. Attribute or trait theory concerned itself with definitional issues and the position of occupations along a continuum of professionalization. The functionalist approach emphasized the functionality of professions in maintaining the social order. Trait and functionalist theorists viewed professionalization as a positive aspect of modernization. However, critics of these approaches claimed that they were ahistorical, that they simply reflected a profession's own uncritical perspective of itself, and that these paradigms disregarded the role of power within professions to manipulate and control their clients and markets.
Modern Theories of Professions

Theorists who rejected early trait and structural-functionalist views of professions created conceptual and theoretical models which focused on the ideas of power and control. Witz (1992) states:

Johnson's (1972) radical reconceptualization of a profession as not an occupation per se but a mode of controlling an occupation has provided the new orthodoxy in the sociology of professions. The main trajectory of the sociology of professions in the 1970s and 1980s has been the emergence of a new critical theory of the professions, which has been centrally concerned with the concept of power. The conceptual indissolubility of the concepts of "power" and "profession" has provided the central axis of the new critical sociology of the professions. (p. 40)

Most contemporary critical theories of professions can be situated within either neo-Marxist or neo-Weberian analytical frameworks. The neo-Marxist paradigm focuses on the structural and historical contexts of professionalization, while neo-Weberian models emphasize occupational closure strategies.

Marxist writers argue that professional dominance arose with capitalism and that professions under state protection make a contribution to the economic and political activities of a capitalist system (Turner, 1987). Neo-Marxist sociologists assert that the functions of modern societies can be explained by the nature of capitalist production. The demand for profit in a capitalist society results in the exploitation and alienation of a large segment of the population. In capitalism, health is viewed as a commodity in the marketplace and as such the provision of health care is guided by the need for profit and efficiency. Navarro (1978) states that class struggle is an essential element in
understanding power relations in society. Using a Marxist framework, Navarro examines medical care in the United States and determines that state intervention in health care results in the reproduction of the class structure, bourgeois ideology and alienation. First, class relations determine the relative powers of physicians and the socioeconomic, racial and sexual stratification of other health care workers. Second, medical ideology mirrors capitalist ideology by blaming ill health on an individual's lifestyle and faulty body mechanisms. Finally, alienation from capitalism is reproduced in the health care setting by the lack of control workers have over the outcome and nature of their work (Clarke, 1981).

Johnson's (1972) early writings on professions examines the ways in which professions control their clients, how such controls are developed and what effect controls have on the professional-client relationship. Professions are viewed as an institutionalized means of controlling occupational activities by either collegiate control, patronage or mediative control (Witz, 1992). Collegiate control exists when a professional defines the needs of his/her client and the way in which the need will be satisfied. Patronage control occurs when the client defines his/her own needs and the way in which they will be met. A demand for professional service may arise from a small group or from a large corporate organization. Mediative control occurs when a third party mediates the association between a professional and his/her client. For example, state mediation would ensure a guaranteed clientele for professionals. However, at the same time, bureaucratic employment of professionals tends to weaken their relationships with colleagues outside bureaucracies and affects, in a negative way, the controls which an autonomous profession imposes on its members (Blishen, 1991). Johnson's typology of professional control is a commanding analytical tool in demonstrating the power of the medical profession and other health professions to impose, on their clients, their definition of the practitioner-client relationship. Although the focus of Johnson's (1982) later work on professions and power shifted to the ways in which occupational activities are structurally and historically restricted, his earlier writings are considered classic.
Another neo-Marxist theorist, Larson (1977) adds to our critical understanding of professions by describing the growth in professionalism as a phase of competitive capitalism. Larson declares that the first stage of modern professionalization must be considered within the historical context of the rise of the capitalist mode of production during industrialization and laissez-faire capitalism. In a second phase of professionalization, the model of professionalism is replaced by the ideology of professionalism. That is, in congruence with the dominant ideology of capitalist societies, professionalism is accepted to be an inequality of status and closure of access in the occupational hierarchy. Although Larson's analysis of the ideology of professionalism is valuable, it fails to identify the conditions under which a profession's claim to autonomy is sustained. Of particular importance here is that some emerging professional groups and new occupations within bureaucratic organizations adopt this ideology as justification for their own professional advancement.

This notion led Larson (1977) to her unique thesis on professional projects and market control and the idea that professions are dependent on a market for their services. The two most important factors of market control are a potential market for professional services, and a cognitive or knowledge base for such services. Professionalization is the creation of two types of monopoly: a monopoly of skill in the market place, and a monopoly of social status in society. These monopolies result in social and economic rewards for a profession. Larson's focus on the distinct cognitive dimension of professional monopoly through control of the professional/client relationship is reinforced by Jamous and Pelouille's (1970) concept of a high indetermination/technicality ratio. All professions are delineated by a duality; a struggle between technical and routine knowledge and skills (technicality) and the mystification of expertise. That is, professional expertise has a mystique about it (indetermination). Johnson (1972) asserts "that the greater the indeterminacy within the professional relationship, the greater the social distance between the client and the professional, and hence the greater the helplessness of the client in
relation to the expert" (Turner, 1987, p. 136). For example, the indeterminate aspects of medical practice reinforce medicine's protection from outside evaluation and hence support its autonomy. Larson, arguing from a Marxist perspective, claims that since the characteristics of a profession are defined by its economic functions, the nature of the market for professional services must serve as the starting point for any analysis of an occupational group.

Neo-Marxist scholars such as Larson (1977) and Johnson (1972) introduced a conflict perspective to the study of professions which did not exist within traditional functionalist or trait approaches. Although these writers provided new insights into the control professions have over their work, their analyses have insufficient understanding of class relations (Willis, 1989). Marxist theorists note that modern professions comprise part of the new middle class that exercises control over a subordinate class of workers. Professions do not merely exist to maintain the social order and unselfishly provide service to society. Marxist analysis suppresses the normative function of professions and brings into question their ethical character by expressing the role of market control and power over specialized expertise. However, despite the contributions of neo-Marxist scholarship to the study of professions, this work has been criticized for not adequately addressing the gendered dimensions of professions (Witz, 1992). Willis (1989) states:

The argument has been whether sexual divisions are ultimately reducible to the theory of class relations in capitalist society, or whether it is a structural element which is independent of class divisions though relevant to them. The penetration of feminist writings into sociology and the gradual overdue development of an awareness of the importance of gender as a source of social differentiation and inequality has led to a lively debate about the relative importance of class versus gender as dimensions of inequality- most explicit in Marxist-feminist literature. (p. 18)
Contemporary feminist critiques that are informed by a Marxist framework view the medical profession as a privileged occupational group which exerts patriarchal authority and control over subordinate social groups, especially women. In this Marxist notion, the male-dominated medical profession subordinates paramedical occupations comprised mostly of women, rendering these groups into subordinate associations (Turner, 1987). Feminist theory asserts that, within the division of labor in health care, women continue to occupy a subordinate role, as illustrated by the subordination of nursing and midwifery to medicine. Extending the tenets of Marxism, feminists argue that the division of labor in the traditional household is reproduced in the workplace, where women are employed to reduce the costs of labor.

While neo-Marxist theorists offer insights to understanding inter-occupational conflict, professional dominance and sovereignty as related to structural and historical systems of modern society, neo-Weberian authors introduce a class analysis of professional monopolization. In the tradition of Weber, the professional person is not motivated by self-interest or the desire for economic rewards, but by an ideology of service (Turner, 1987). Within this sociological analysis, unlike Marxist writings, the profession of medicine would be seen as being dedicated to service without receiving material rewards. Weberian theory offers an examination of the theoretical status of professionalism and its association with class and political structures.

Neo-Weberian works on the sociology of professions make a significant contribution to this study by offering an analysis of occupational closure (Freidson, 1970; Berlant, 1975; Parkin, 1979; and Parry & Parry, 1976). Parkin (1979), a major supporter of neo-Weberian closure theory, defines modes of closure as "different means of mobilizing power in order to stake claims to resources and opportunities" (Witz, 1992, p. 44). This author proposes a conceptual model of occupational closure strategies which may be used by members of professional projects. Essentially, the model is comprised of four strategies: exclusionary, inclusionary, demarcationary, and dual closure.
Exclusionary and demarcationary strategies are employed by dominant professional groups in the hierarchy of closure to achieve intra-occupational and inter-occupational control including: (a) the regulation of producers, (b) the establishment of a monopoly of skills, and (c) the establishment of jurisdictional boundaries. Subordinate occupational groups use inclusionary and dual closure strategies in response to domination by other professions. These strategies involve resisting the demarcation tactics of dominant groups and establishing a position within a division of labor by employing exclusionary strategies. In effect, all closure strategies are related to mechanisms of control concerning matters of entry into occupations, occupational regulation, division of labor, and monopoly of skills and knowledge. Parkin (1979) views professionalism primarily as an exclusionary closure strategy designed to manipulate the supply of members of a particular profession, thereby having a positive impact on market value.

In the neo-Weberian tradition, Freidson (1970), in his extensive study of the medical profession, considers professions as occupations based on a form of social closure. Freidson's emphasis on the role of power in the medical division of labor serves to delineate the monopolistic power of the medical profession with respect to services provided, definitions of health and illness, and the subordination of related professions to paraprofessional status. According to Freidson, a profession acquires and maintains its position of power by the protection and dedication of a society which values its work. Its position is safeguarded by the economic and political influence of an elite segment of society. As a result, barriers are erected for occupations wishing to achieve professional status. Competing occupations are denied the many advantages bestowed on a chosen profession. Paraprofessions, in Freidson's view, fail to attain full autonomy in control over their work, development of their educational requirements and requirements for licensing standards. Although some paraprofessionals, such as nurses, are successful in acquiring many of the attributes normally associated with a profession, their autonomy is not complete, and thus their power, prestige and status are not equal to a profession. In
short, Freidson emphasizes autonomy and dominance, not collegiality and trust, as the hallmarks of professionalism. Autonomy implies a position of legitimate control over work, rather than dominance in the division of labor.

In Freidson's recent examination of professionalism he emphasizes the importance of three critical elements: knowledge, culture, and the public (Freidson, 1994). The first of these elements refers to particular skills and knowledge claimed by professions. Culture pertains to the institutions that communicate to the public the ideas and information that shape the professional's self-concept. Freidson claims that these three factors are essential for "understanding the demand for different professional services and the value assigned to them, the support the public may provide to efforts by the state or capital to enlarge, restrict, or control professional enterprises, and the prestige and authority of professions themselves" (p. 43). Further, the study of professions must involve an understanding of a connection between a professional institution and the state, the ultimate source of power.

After two decades of studying professions, Freidson posits that professionalism is underpinned by the central principle that the members of a profession control their own work, which is based on a specialized skill and knowledge. As such, professions obtain the delegation of state power. An analytic theory of professionalism, yet developed, must address the nature and varieties of specialized knowledge, the role of this knowledge in the differentiation of work into occupations, and the ways in which that differentiation becomes organized. Freidson claims that neither class theory nor organizational theory can rationalize the self-organizing potential of occupations. He also calls for the development of a guide for the empirical and comparative study of occupations: one that is created systematically out of basic concepts of work, the ways work can be organized and controlled, and the institutions required for acquiring and maintaining that organization.

In a recent comprehensive review of the sociology of professions, Macdonald (1995) examines Larson's conceptualization of the 'professional project'. Her conceptualization draws on Weber's view of stratification and incorporates his notion that
the 'project' is pursued in both the economic order and the social order, and the idea that specialist and expert knowledge creates an 'opportunity for income'. The state grants to a profession a legal monopoly of knowledge-based services. Social mobility and market control are viewed as the outcome of the professional project. This project "emphasizes the coherence and consistence [sic] of a particular course of action, even though the goals and strategies pursued by a given group are not entirely clear or deliberate for all the members" (Macdonald, 1995, p.10). The market control aspect of the 'project' is dependent on a body of relatively abstract knowledge that can be translated into some practical application. A market for services, or market potential must exist.

Larson's (1990) more recent work has turned to the ideas of poststructuralist/postmodernist thinker Michel Foucault. Macdonald (1995) states:

Foucault's ideas have appeal for the sociologist of the professions because his central concern is with the relationship between knowledge and power; but he tackles it not in the limited way to be found in the Anglo-American power approach to the professions of, say, Freidson or Johnson, but on a societal scale. His view is that the emergence of modern society was accompanied by an epistemic shift from a 'classic' to a 'modern' form of knowledge, which is organized into 'disciplines'. (p. 24)

Larson's attention to Foucault's conceptualization gives way to discussions of 'structured inequality' and ideology without being bogged down by problematic Marxian economic theory, but instead is based on detailed historical study. However, the originality of Foucault makes it difficult to situate his work clearly within any sociological tradition. According to Macdonald his work is concerned with the body and doctors' relation to it through what he calls 'the gaze' (le regard medical) and therefore may be of more interest to sociologists of health and illness. Another criticism of Foucault (as a postmodern thinker)
rests with the inadequacy of his work as a form of social analysis. Feminist Nancy Harstock (1990) states that “despite Foucault’s obvious sympathies for subjugated and marginalized groups, his analysis of power is limited because it fails to articulate an adequate theory of resistance. Foucault does not show how marginalized groups may seize power in order to ensure the transformation of social relations” (p. 168). Postmodernist theory is not founded on a desire for universality. Rather, the desire is for pluralism, anti-reductionism, heterogeneity, and contextualism. Postmodernism argues that all knowledge is put into context through its historical and cultural nature (Agger, 1991). As a form of social analysis, postmodernism offers little direction in terms of how systematic inequalities and oppression are perpetuated in society. In contrast, the basis of feminist theory, the belief that all forms of social oppression are unjust, calls for large-scale social analysis (McNay, 1992).

Despite these limitations, Turner (1987) points to Foucault’s contribution to an understanding of the connections between discourse, practice, and professional groups.

This Foucaultian enquiry into knowledge/power was organized around an enquiry into the body (of individuals) and bodies (of populations). Foucault saw the medical struggle around the body historically as the origins of a biopolitics of populations in modern society. These professional and medical discourses evolved in relation to the growth of the surveillance of societies through the exercise of discipline over the body and populations. In particular, Foucault was concerned to trace the development of a form of surveillance which he called ‘panopticism’ through the clinic, the asylum and the prison. (p. 10)

Foucault’s work on the relationship between the discourse of scientific knowledge and the enactment of professional power, as well as the development of various forms of discipline
and surveillance offer a theoretical framework for the study of meaning, structure, social order, and power. In Foucault's view, one's reality never reaches beyond what language permits, that is, what we know and what things are depend on how they are defined. He argues that knowledge and power are intimately intertwined. Extending this assertion, he claims that professional bodies legitimize their social power by creating historical accounts (discourse) of their establishment as altruistic organizations. Foucault's conceptualization of the application of knowledge to the establishment of a profession has been applied, for example, by Nettleton (1992) in her study of dentistry. Specifically, Nettleton embraces Foucault's assertion that there is a need to see the history of a profession as a component of the way in which knowledge was reconstituted in the modern period. In this light, Nettleton examines dental techniques and "how a discourse was developed that brought about the constitution of the mouth as an object, which is structured by dental practices" (Macdonald, 1995, p. 174). In the case of dentistry, the oral cavity becomes an object of knowledge. Further, dentistry locates this object in a social space that dentistry defines, and by applying 'the gaze', it controls (surveillance) and disciplines this aspect of human life.

In summary, there are several theoretical frameworks for studying professions and professional development. Although such theories appear to offer comprehensive analyses of professionalism, in reality most are narrowly constructed components describing some aspect of development. Abbott (1988) states that "there are wide differences in the substance of general theories, in the driving mechanisms they posit, in the pattern of causation they adopt, in the particular structures they emphasize" (p. 19). However, both traditional functionalist supporters and power perspective authors agree that modern professions are a phenomenon of modern industrial society and the capitalist state. Structural-functionalist models of professionalism have been substituted by concepts of monopolization, power, and control. More contemporary conflict oriented paradigms, such as those described by neo-Marxist and Weberian theorists, have forced scholars to
consider history and structure, class issues and economic determinants of professionalism. Postmodernism offers a new way to theorize and study modern societies. It has a connection to social science, especially in the areas of cultural and discourse analysis and the sociology of social control (Agger, 1991). Turner (1987) suggests that an eclectic framework may have utility in understanding professionalization.

**Issues of Professionalism**

An integrated theoretical framework for examining the transformation of occupations into professions does not exist. However, individual traditional and contemporary paradigms presented in this literature review offer insights into specific conceptual issues of professionalism and the attainment of professional status. Broadly defined issues include: the "scientism" of professions, the meaning of professional work, division of labor and specialization, professional dominance, ideological nature of professions, proletarianization of professions, and gendered aspects of professionalism. Several of these matters are of particular importance to this study in analyzing the forces and barriers underlying the conversion of semi-professions to professions. For the purpose of exploring the transformation of occupations in the health care sector, issues pertaining to the division of labor, professional dominance and gender, and professional work are included in this review.

**Division of Labor**

In the health care sector, the division of labor in professional work is a complex component of the study of professionalization. In the researcher's view, this issue has two interesting features: it involves a hierarchy and domination of one group over others. Two related issues are: (a) whether semi-professions attain functional autonomy within a
hierarchy of labor, and (b) whether an expanding division of labor in health care will pose a threat to monopolies held by dominant professions. Alongside the development of medical knowledge and technology in post-industrial society is a proliferation of health care occupations. Prior to this time, physicians were the prominent occupational group in the health care arena. University education and the application of new scientific discoveries gave physicians a strong political position for persuading the state to subordinate competitive practitioners to them. Medicine dominates the division of labor in health care because it controls the knowledge base for health care. The health division of labor can be viewed as the articulation of knowledge relationships in a hierarchical form (Willis, 1989).

Freidson (1970) explains the development of the contemporary division of labor in health care as exceeding mere technical or functional differentiation. Historical, political, social, and economic factors play a part. More specifically, the relationship between the class structure and the division of labor in health care needs to be examined. Most accounts of this topic have been based on an ahistorical consensus perspective and have neglected important conflicts between occupations by focusing primarily on the concept of roles among occupations (Etzioni, 1969; Moore, 1970). A variety of titles have been created to identify members of non-dominant occupations including paramedical, paradental, paraprofessional, semi-professional, allied health care worker, marginal professional, limited professional, and emerging professional. Generally, these terms refer to occupations that do not possess professional status but may have aspirations to achieve such status and have acquired some of the characteristics normally associated with a profession.

Specialization in the health care system has several forms. First, a division of labor may evolve between dominant professional groups such as dentists and physicians. In this case, dentistry developed independent of paramedical occupations. Second, dominant groups may experience internal segmentation, for example, specialties within medicine or dentistry, such as neurology or periodontology. Third, allied health occupations may
develop, for example, dental hygienists, nurses, and physiotherapists. Finally, specialization can also occur within paramedical or paradental groups, for example, dental assistants and nursing assistants (Blishen, 1991).

The division of labor in health care is a stratified system. Allied health care personnel are organized around the work of the dominant profession. Typically, the activities of these workers usually include: tasks that have been delegated to them by the dominant profession, work which is carried out by prescription from a physician or dentist, and varying degrees of supervision. Frequently, delegated tasks are those which are considered by the dominant profession to be routine and less challenging to perform, but are essential to provide to clients.

Another factor, in addition to historical and technological developments, which has contributed to a growing division of labor in health care is the increasing intervention of the state in the planning and rationalization of health care services. The emergence of some paraprofessionals has been prompted by government's need to provide health care services in a cost efficient and organized manner, particularly in bureaucratic settings such as hospitals. Attempts have been made to substitute less expensive care provided by suitably educated health personnel such as nurses and dental hygienists. In recent times, human resource substitution has achieved greater importance. However, although dominant professions such as medicine generally support the idea of a variety of health personnel delivering service, they remain concerned that these personnel do not interfere with their occupational jurisdictions and professional dominance. Therefore, both the professions of medicine and dentistry "continue their efforts to maintain their legally and institutionally sanctioned monopoly of their practice by limiting the roles of personnel closely associated with them in their practice" (Blishen, 1991, p. 94). Very few paraprofessionals practise independently from dominant professional groups. Legislative acts entrench the power and authority of dominant professions. Dominant professions are influential in determining whether authorized activities are recognized as an occupational specialty. In medicine and
dentistry, where the division of labor is expansive and the majority of service is provided by other health personnel, physicians and dentists retain ultimate control/responsibility over the relationship between health personnel and clients.

As mentioned previously, two issues related to the division of labor in health care involve opportunities for functional autonomy for emerging occupations, and a response by medicine and dentistry of careful protection and safeguarding of their dominance in the health care system. The hierarchy in the division of labor bestows on physicians and dentists greater prestige than that held by allied health care personnel. Similarly, a hierarchy of prestige exists for paraprofessionals. For example, in nursing, registered nurses enjoy greater prestige than do nursing assistants, licensed practical nurses, or orderlies. The first element in the division of labor is represented by a sharp conflict which arises with the growth of new occupations that may be capable of achieving functional autonomy, that is, the delivery of health services independent of medical or dental supervision. Clinical psychologists, for example, were successful in acquiring independent practice from physicians with the exception of being able to prescribe drugs (Freidson, 1970). Functional autonomy generally refers to non-supervised, independent practice and the ability to sustain such practice by recruiting clients on a non-referral basis. Freidson asserts that the potential for conflict is ripe when health occupations hold some degree of autonomy and the nature of their professional work overlaps with the work of physicians. Not only do new health occupations experience resistance from established professions that engage in restrictive competition, but they may also encounter resistance from one another. For example, dental hygienists may be reluctant to permit training for dental assistants in an area which has exclusively been the occupational territory of dental hygienists (e.g., the removal of hard deposits from the teeth by means of instrumentation).

A second feature of the division of labor in health care is the phenomenon of the domination of health care by medicine. It is well documented that, in Canada, there has been a proliferation of health care occupations over the past several decades. The question
is whether an increasing division of labor in the health care system has had or will have a negative impact on the dominance of the medical profession? Willis (1989) states that medicine dominates the health division of labor economically, politically, socially and cognitively. Medical dominance is enforced at three levels: dominance over its own work, over the work of others, and in the wider health sphere. Dominance at the first level is referred to as autonomy and means that medicine has an exclusive right to practise, and the profession is not accountable to other health occupations. The second level denotes a relationship of authority and involves supervising and directing the work of others. At the highest level, dominance is signified by the term medical sovereignty, a concept Zola (1986) describes as medicine's unique ability to act as an institution of social control, and succeed in medicalizing our everyday lives.

Willis (1989) claims that the development of the division of labor in health care which results in professional dominance is intimately connected to political and economic factors including activities of the capitalist state. Applying a neo-Marxist framework, Willis identifies three elements of the division of labor in the health system related to professionalism. First, he draws a distinction between informal unpaid health workers, usually family members, volunteers and often women, and formally paid workers in the division of labor. Willis is critical of the untheorized study of the relationship between paid formal work and unpaid informal work. Second, Willis differentiates between the division of labor as one which is either negotiated or imposed. Negotiation of labor involves an agreement between organized occupations of the specific allocation of tasks in health care. However, in an imposed division of labor, boundaries for formal task differentiation and negotiation exist. Larkin (1981) adds that self-regulation through licensure and certification contributes to the continuity of a medically imposed division of labor. Through this regulatory process, boundaries for scope of practice and licensed acts are clearly defined so that one occupation may not encroach on the jurisdiction of another. Third, the division of labor in health care has been characterized by increasing capital and labor intensiveness.
Generally speaking, the development of new technology has provided the impetus for the development of new occupations.

Willis (1989) identifies two definite historical processes of differentiation. The first is referred to as horizontal specialization or segmentation which exists within dominant professions such as medicine, and results in specialties. A sometimes undesirable consequence of specialization for a dominant profession is that it may have difficulty acting in a collective fashion with a non-uniform political strength. The second process is termed vertical specialization and is more relevant to the study of the hierarchical structure in the division of labor in health care. Two factors have influenced this process: sub-professional dominance and secondary deskilling. Sub-professional dominance occurs when a dominant occupation chooses to pass on routine mundane work tasks to a subordinate occupation at a lower level on the hierarchy. In some instances, such occupations are created specifically for this reason. The creation of dental hygiene in the early 1900s serves as a classic example of this form of specialization. Historically, the occupation of dental hygiene was established for the specific purpose of providing oral prophylaxis and health instruction to children because dentists were not content to limit themselves to one task (Motley, 1986). Nursing serves as another example of an occupation created to provide care to clients while physicians provided cures for illness. Secondary deskilling results when certain health occupations are legally prevented from carrying out some tasks which are deemed to be the exclusive territory of the dominant profession. For example, optometrists cannot legally diagnose ocular pathology which is the exclusive purview of ophthalmologists.

The division of labor in health care has become highly complex and specialized. The sophisticated and highly technical nature of health care has created a system whereby care is provided by a wide variety of personnel. Although the modern division of labor in health care is complex, it is highly organized and structured. A hierarchy exists with low status occupations near the bottom of the hierarchy, marginal occupational groups in the
middle, and the dominant profession of medicine at the pinnacle. With the exception of dentistry, the only health occupation that is truly autonomous is medicine. It has the authority to direct and evaluate the work of others, but is not evaluated by others itself. Its autonomy is sustained by the dominance of its expertise in the division of labor in health care (Freidson, 1986). While many occupations may possess features such as dedication to service, commitment to work and formal education, the dominant profession has a unique structural relationship to the division of labor. The difference between a subordinate profession and a dominant profession is the existence of a hierarchy of institutionalized expertise. Physicians enjoy both an occupational monopoly and a position of dominance over related and adjacent occupations in the health care division of labor. Although today there are various competing occupations aspiring to higher professional status that may have varying degrees of functional autonomy and independence from dominant groups, the profession of medicine has managed to maintain its dominant position at the helm of the health care system. It does so through a variety of economic, political, social, cultural, legal, and ideological mechanisms, in addition to several modes of domination.

Professional Dominance and Gender

The phenomenon of professional dominance is an important element in any analysis of the transformation of an occupation to a profession, since it represents a significant barrier for most occupations wishing to professionalize. Professional dominance is closely related to the division of labor in the health care system. Turner (1987), writing from a Marxist perspective, defines medical professional dominance as:

a set of strategies requiring control over the work situation, the institutional features of occupational autonomy within the wider medical division of
labor, and finally occupational sovereignty over related occupational groups. This medical dominance further involves a privileged location within the general class structure of society. (p. 141)

Three modes of professional dominance can be examined in relation to semi-proessions: subordination, limitation, and exclusion (Turner, 1987; Willis, 1989; Blishen, 1991). Modes of domination in the case of the emergence of specific health occupations occur in relation to social and historical factors. An emphasis in this section will be on the mode of domination known as subordination, and gender related issues.

Subordination, as a method of domination, is closely associated with the vast majority of occupational groups found in the hierarchy of the division of labor in the health system. It depicts a situation where the nature and activities of occupational practice are dictated by the dominant profession. The occupation itself has no (or minimal) independence in its work, little autonomy and probably few self-regulatory powers. Such occupations work under the direct control of the dominant profession. Examples of subordinated occupations include midwifery, nursing, and dental hygiene. Each of these occupations is dissatisfied with its occupational status in the hierarchy of the division of labor and is engaged in professionalization.

A common analytical tool to be considered in examining the subordination of these particular health occupations is gender. The predominantly female character of these occupations presents unique theoretical considerations. Neo-Marxist feminists argue that, in the traditional household, women cheapen the costs of labor by their domestic work, and patriarchy in the household is functionally relevant in a capitalist society. In the health care division of labor, this work is reproduced by women as they continue to function in subordinate positions in the workplace, primarily to reduce the costs of labor in hospital and clinic settings. Feminist theory argues that "nursing is par excellence an example of women under ideologies which assert the naturalness of nursing as a feature of the female
personality. Women are exploited as nurses because they are socialized into a doctrine which equates nursing with mothering and sees the hospital ward as merely an extension of the domestic sphere of labor" (Turner, 1987, p. 149). Neo-Weberian theory integrates the element of gender with the concept of a demarcationary closure strategy. Demarcationary strategies are mechanisms of inter-occupational control concerned with the monitoring and regulation of the work of related occupations in a division of labor by a dominant profession. Such strategies involve the control of boundaries between occupations. Witz (1992) emphasizes the importance of demarcationary closure strategies in understanding how inequitable gender relations are developed and sustained within an occupational hierarchy in the health division of labor. She states:

Gendered strategies of closure turn not upon exclusion, but upon the encirclement of women within a related but distinct sphere of competence in an occupational division of labor and, in addition, their possible (indeed probable) subordination to male-dominated occupations. The concept of a gendered strategy of demarcationary closure directs attention to the possibility that the creation and control of occupational boundaries and inter-occupational relations may be crucially mediated by patriarchal power relations. (Witz, 1992, p. 47)

Witz claims that the institutions of a traditional and modern patriarchal society sustain the institutionalization of male power and privilege within the health care division of labor between medicine and related occupations such as nursing.

The sociological study of nursing has revealed a history of structural, ideological, political, patriarchal, and economic issues associated with its subordination to medicine. Studies of nursing in the mid 1950s examined the historical evolution of nursing during the early part of the twentieth century as a suitable secular occupation for unmarried women. A
spiritual emphasis was also placed on the ability of women who nursed children to nurse the ill (Turner, 1987). At this point in history, a view of men as being connected to leadership placed the perspective of nursing in a subordinate position. Medicine was male dominated and male physicians were seen to be responsible. The patriarchal situation surrounding the emergence of nurses established an ideology of a connectivity between women, mothering and nursing which has dominated the past century and hampered nursing's professional growth. The study of nursing as an emergent profession has also been intimately connected to an examination of Florence Nightingale as a destructive force or historical impediment to nursing's occupational development. Nightingale's Victorian values were transmitted through her staunch attitudes and beliefs in the subordinate position of nurses to physicians. Her refusal to support the registration of nurses further entrenched the notion of nurses as subordinate, semi-professionals whose low position and status in the division of labor was to persist for the next century.

Several contemporary studies of nursing and its domination by medicine have neo-Marxist/feminist orientations. Modern theories have moved beyond issues of morality and professional standing to consider conflict perspectives such as power, class, and hierarchy. Turner (1987) states:

One problem for nursing as a profession is its subordination to the medical profession so that nurses in theory merely execute decisions arrived at by doctors. Nursing is subordinated within the technical division of labor surrounding medicine and the development of specialized educational programmes for nurses has not significantly improved their status in the medical hierarchy within the hospital context. Nurses suffer in particular from the dilemmas of professionalism versus bureaucracy, since within the hospital context it is often difficult for them to exercise initiative and autonomy. (p. 149)
Freidson (1970) extends Turner's thesis by arguing that nursing's lack of control over its work is its major barrier to achieving professional status. In Freidson's view, modern nursing is an incompletely closed occupation in a state of change. Nursing is seeking to develop and establish new professional work in the area of nursing administration, and establish a distinct cognitive base for nursing practice, in order to institute functional autonomy apart from medicine.

The sociology of dental hygiene is not as well documented as is the case of nursing. However, the subordination of dental hygiene to dentistry follows some of the same patterns as nursing to medicine. Preventive dentistry, the backbone of dental hygiene practice, was first recognized in the mid 1800s. In 1902, an American dentist, Dr. C. M. Wright suggested to his colleagues that a subspecialty of dentistry be created in order to allow educated, refined women to be trained in the cleaning of teeth and massaging of gums. These practitioners of preventive dentistry were to be educated in dental schools and would be certified upon completion of their training. Amendments to the Connecticut Dental Practice Act in 1907 resulted in the legal recognition of the health occupation of dental hygiene, and the establishment of the first formal education program in 1913 by Dr. Alfred Fones in Connecticut (Motley, 1986). Fones was the first person to consider the usefulness of dental hygienists working in public health settings, in addition to private practices. He believed that women trained as dental hygienists were suitable for providing prophylaxis and oral health instruction to children; that women would be content to limit their energies and skill to providing one form of treatment. Fone's view of dental hygienists as women who possessed certain attributes which made them suitable for conducting the work of oral prophylaxis still prevails among segments of organized dentistry. Today, resistance to the expansion of dental hygiene work beyond preventive practices is based on dentistry's insistence that Fone's original conception of a dental hygienist is still appropriate in today's society in spite of changes in oral health needs, the
increased level of education of dental hygienists, and technological advances in dental hygiene practice.

In short, historical and structural similarities in the development of the nursing and dental hygiene occupations involve occupational and patriarchal subordination, lack of autonomy and control over work, and gendered power imbalances which prevent these occupations from achieving professional independence. However, one feature of the organization of dental hygiene work intensifies the subordination of this occupation to dentistry. In no other health care environment do individuals work as closely together in the clinical setting as dental hygienists and dentists. Whereas the majority of nurses work in institutional settings, most often in the physical absence of physicians, dental hygienists are employed primarily in the private offices of dentist employers, in immediate proximity to one another. The structure of this working arrangement has historically created a situation where, in general, dentists have constant, direct control over the work of dental hygiene practitioners, with the exception of community health and education settings.

Changes in oral health needs, practice patterns, dental technology, and the educational qualifications of dental hygienists; shifting patterns in the regulation of dental hygiene; greater consumer awareness; and an increased desire by dental hygiene for greater independence have led to breakdowns in the interrelations between dentistry and dental hygiene. As the organizational structure and practice of dental hygiene are evolving, attempts by dental hygiene to alter traditional, controlled, dominant relations between the occupations have been met with resistance and rigid opposition from dentistry. Further, Blishen (1991) views dental hygienists as a competitive market threat to dentists. Dentists dominate the market in terms of oral health services. With the exception of denturists who may provide a limited specific form of dental treatment directly to the public, dentists control the public market for services, in addition to regulating, dominating and having authority over allied dental personnel in most jurisdictions. If organized dentistry perceives dental hygiene as encroaching on a portion of this economic market, dentistry's response
will be to establish further barriers to this encroachment through mechanisms of deskillimg and increased regulation of dental hygiene.

Structural relations between occupational groups, as characterized by methods of domination, are an important feature of the study of modern professions. Such analyses contribute to our understanding of the position of various health professions in the division of labor and the control which dominant professions can exercise over related occupations in the form of subordination, limitation, and exclusion. An equally relevant, but often neglected, element in the literature on professions is the impact of gender relations on professional development. In the case of predominantly female occupations striving for professional autonomy, gender issues often present insurmountable barriers. Male dominated professions such as medicine and dentistry historically positioned women in subordinate roles within the health care system. Patriarchal powers in the workplace continue to flourish, preventing occupations such as nursing and dental hygiene from gaining professional autonomy and escaping traditional subordinate roles. Although these occupations have made some gains in their professional endeavors to establish a structural link between education and occupational activities, the gendered notion of professions acts as an impediment to achieving full professional status.

**Professional Work**

Professional practice and professional work must be examined within the context of broader societal and occupational issues. What is it about professional practice that allows a professional person to have a privileged position in society and in the strata of labor? In particular, how does the work of established health professions influence inter-professional relations? The nature of professional practice operates at two levels. At a micro or individual level, professionals interact with and provide services to clients. The professional/client relationship has been influenced more recently by several factors
including: the demands and needs of the client, consumer awareness and powers, an increase in community participation and government intervention in health care delivery, and the growth of allied and related health specialties. At a macro or organized level, professionals have relationships within the health sector and with government. Professional practice relationships within the health care sector are defined by the legitimate boundaries of expertise. In health care, physicians have the widest range of expertise. The actual work of health professionals is said to have both objective and subjective elements; both art and science (Abbott, 1988).

The constituents of professional work have been studied by more recent theorists of professions. Willis (1989) describes two primary features of professional practice: science and ideology. Technology is created to be congruent with capitalist modes of production. Ideologically speaking, professionals use types of knowledge other than science. Freidson (1970) argues that professionals, physicians for example, form knowledge based on their own clinical experiences (a type of empiricism) and use this knowledge as the basis for decision making. If the ideology (art) of clinical practice is viewed as having a material reality, then all aspects of professional practice may also be ideological practices. For example, physically examining clients, communicating with them, and issuing prescriptions may all have ideological elements (Willis, 1989). The twentieth century notion of science as truth has given legitimacy to medical practice and in turn this practice has become authoritative and hegemonic. The ideology of medicine associated with its claim of effective therapeutic care has also given legitimacy to medical dominance. An increasingly complex technological and bureaucratic society has led to the medicalization of daily living and reliance on the expertise of physicians to direct not only health matters, but also the social and cultural aspects of people's lives. Medicine's involvement in this regard appears to exceed the legitimate boundaries of the profession's expertise.

Abbott's (1988) analysis of professional work moves from a critique of the structural elements of practice to consideration of the impact of professional tasks on inter-
professional relations. Therefore, Abbott's conception of professional work has utility in understanding occupational issues between emergent professions and established professions. Abbott argues that as professions compete with one another by taking over each other's tasks, it is necessary to understand how professional work comprises these tasks and how this process makes one occupation more vulnerable than another. A basic device of inter-professional competition is that professions may use their abstract knowledge to reduce the work of rivals to a version of their own. Problems related to professional work may be either objective or subjective in nature. Objective problems are created by natural or technological imperatives. Subjective problems are derived from cultural elements. Professional tasks that have objective qualities resist reconstruction. Jurisdictional claims are usually associated with the objective foundations of professional work such as technology and expert knowledge.

A professional task having subjective qualities is defined by the profession which has jurisdiction over a particular task. To examine the subjective qualities of jurisdictions one must identify the mechanisms of professional work itself. Culturally speaking, the jurisdictional claims that create the subjective qualities of a task have three elements: diagnosis, inference and treatment. In theory, these are the three acts of professional practice. Diagnosis involves the classification of a problem. Inference uses the information of diagnosis to develop a range of treatments with predicted outcomes. The act of inference has greater subjectivity than diagnosis or treatment, and as such, has qualities that make a profession's own work more or less accessible to competitors.

Like diagnosis, treatment imposes a subjective structure on the problems with which professions work. The treatment system is organized around ordinary cases that make up the bulk of professional work and for which professions have purely conventional treatment solutions. Routine treatment is often delegated to subordinates to carry out. For example, nurses deliver the majority of primary care to clients within the health care system. This sort of activity may be perceived as making the professional jurisdiction of
medicine vulnerable because nurses are capable of providing medical treatment which has become incorporated into nursing practice. Dental hygienists are delegated by dentists to carry out work tasks making up the majority of preventive oral therapy regimes. However, in the cases of both nursing and dental hygiene, the work of these semi-professionals is authorized by dominant professional groups, thereby minimizing competitive and jurisdictional vulnerability.

Professional vulnerability with respect to work may also be subject to the efficacy of treatment, cost of treatment, the measurability of results, and the acceptability of treatment to clients. In terms of the efficacy of treatment, the failure of treatment to produce successful results may make a jurisdiction vulnerable. In the case of health care, the cost of treatment is not only of concern to the public being served by health professionals, but also to governments and other agencies who subsidize the costs of health services. More recently, such concerns related to health care are receiving some attention from insurers of health care and provincial governments in Canada (Blishen, 1991; Freidson, 1994; Walby & Greenwell, 1994). The use of allied health professionals in the provision of care is known to reduce escalating costs, and in some cases may present a jurisdictional threat to some professions. Professions can price themselves out of markets. In the case of current practice by nurse practitioners and independent dental hygiene practitioners in the United States, the jurisdictional monopolies held by medicine and dentistry appear to be unattainable at this point in time (Blishen, 1991). However, denturists have been successful in establishing independent practices and providing limited dental services directly to the public at affordable prices, thus infringing on dentistry's sole monopoly on the delivery of dental care (Hazelkorn & Christoffel, 1984). This encroachment by denturism into dentistry's jurisdiction has resulted in a long and continuous political and legal battle between these occupations. The dental profession's resistance to such practice outside the control and authority of dentists is well documented.
Abbott (1988) argues that too little professional inference often results from a pattern of routinization. In professions, whole procedures or certain skills frequently are routinized. That is, a procedure is composed of steps which are repeated in a precise fashion each time the procedure is undertaken. In some cases, such procedures are delegated to subordinates to carry out. For example, dentists delegate routine clinical functions to dental hygienists. Abbott contends that when routine tasks are not delegated they are "an obvious target both for poaching by other professions and for compulsory deprofessionalization by the state" (p. 51). Too much inference can also make a profession susceptible to jurisdictional invasion by other professions. While a profession may successfully demonstrate the efficacy of a treatment, a profession that is purely esoteric will have difficulty showing the cultural legitimacy of the basis for that efficacy. In short, an occupation that utilizes minimal inference makes its work seem not worth professionalizing. Excessive use of inference makes it difficult for a profession to legitimize its work. It is evident today that in both nursing and dental hygiene curricula, problem solving and critical thinking skills related to the inferential component of professional work are being emphasized in an attempt to develop the non-routine aspects of practice (Cameron & Fales, 1985; Chaska, 1990). In the situation of either too much or too little inference, professional jurisdiction may be weakened.

Professional work is directly related to a system of knowledge that formalizes and legitimizes the skills which comprise this work. Abbott claims that professions develop abstract, formal knowledge systems and that these systems affect professions' jurisdictions. The objective and subjective characteristics of professional work determine the vulnerability of such work to intrusion or encroachment by other professions. The professional practice components of diagnosis, treatment, and inference create an association between a profession and its work. The features of professional work influence the dimensions of inter-professional competition and can result in jurisdictional
weakness. A profession's jurisdictional claims are strengthened by its formal knowledge system and its cultural legitimacy.

Summary

The mid-twentieth century witnessed a shift in the theoretical framework for studying the phenomenon of professions. Early theories of professions arose to describe the "ideal type" profession. Medicine was defined as the archetype profession and was sociologically dissected in order to document its salient features. Minimal integration of historically relevant variables occurred in theory development, with little reference to influencing variables such as economic, social, political, and legal factors. Occupations with aspirations of becoming professions set out on a path to acquire certain professional attributes. Although occupations such as dentistry and law have established professional status, numerous other paraprofessions, having embarked on a long course of professionalization, have failed to achieve professional autonomy. Characteristically, professions are conceived of as being engaged in prolonged periods of education and possessing ethical standards. Numerous other derived characteristics flow from these primary or core traits. Professionalization is sometimes viewed as a process with an end product of professionalism. Occupational growth may be conceived as the attainment of a position along a professionalization continuum. However, traditional theories of professions have failed to capture both conceptual and pragmatic explanations for the success of some occupations to professionalize and not others. Recent literature on the history and development of modern occupational groups continues to cite early trait and functionalist theories as critical to professionalization efforts.

Contemporary paradigms of the system of professions have increased our explanatory and analytical powers to contemplate the question of professional transformation. Conflict perspectives, informed by neo-Marxist and neo-Weberian
theories, have provided an analysis of modern professions relative to history, class and structure issues, and economic determinants. Modern critiques have placed the development and growth of professions within the context of broader societal factors and events. In most recent times, theorists have recognized the relevance of gender politics in relation to the growth of professions, the division of labor and professional projects. Some authors suggest that class and gender issues are integral to the study of professions.

Professionalism is a successful ideology and the assertion of power over other occupations, as well as privileged acceptance by the state and society at large. There is no standardized or unilateral process of professionalization which may be universally applied by aspiring professions. Deviations in government and public support will affect the control and institutionalization of various professional activities. The transformation of semi-professions to professions does not take a static form and will be influenced by both impeding factors and forces which facilitate professional growth. Fulton (1988) refers to the role of exogenous and endogenous variables in this regard. Exogenous variables are those which largely lie outside of the control of a particular occupation, such as the form of government intervention in the activities of interest to the group, public perceptions of the group, the source of incomes for members of the group, and the history of government relations. Endogenous or more controlled variables include: the organizational structure of the group (formal association); the type and effect of appropriate professional services; to some extent, the type and length of formal education requirements; and the degree of cohesion within the group.

Some marginal professions may never achieve the professional status held by occupations such as dentistry or medicine, but they may achieve some degree of professional autonomy and self-regulation allowing them to control their own work, but not necessarily sharing the same level of prestige and status ascribed to full professions. Such a situation would shift subordinate, dependent occupational groups to a position of limited professional autonomy. Occupational barriers such as restrictive political and legal
powers, minimal economic and human resources, poor organizational structure, lack of public and state support for a market for services, and a lack of a distinct ideology will hinder professional growth.

The complexities of the structure and organization of professions and their relations in broader societal contexts prevent us from being certain or making predictions about the fate of various occupational groups. However, the theoretical paradigms and conceptual issues presented in this review have enabled the researcher to have a greater critical understanding of this phenomenon in modern society. While early theories have utility in describing the common traits associated with professions and their functional role in society, contemporary models have deepened and broadened sociological analyses of the transformation of professions and the transition from novice to professional expert. In the next section, an examination of the historical development of dental hygiene, the educational basis of the occupation, its hierarchical position within dentistry, its organizational structure, regulation issues, and the working conditions of its members contribute to the investigator's understanding of the professionalization and acculturation of dental hygiene. Analytical constructs informed primarily by modern theories of professions will be considered in light of the historical and occupational development of dental hygiene. Such constructs include, for example, professional dominance and subordination, and the gendered nature of professional work.

Occupational Development of Dental Hygiene

Development and Growth of Dental Hygiene

The health occupation of dental hygiene was given legal recognition in the United States in 1907. It was proposed that dental hygienists be employed by dentists in private practice, or that they provide preventive dental service in their own offices, or at the homes
of patients (Motley, 1986). Dr. Alfred Fones, the first dental hygiene educator, believed that women trained as dental hygienists were suitable individuals for cleaning children's teeth. In a paper read before the National Dental Association in 1911, Fones stated:

I believe the ideal assistant for this work to be a woman. A man is not content to limit himself to this one specialty, while a woman is willing to confine her energy and skill to this one form of treatment. A woman is apt to be conscientious and painstaking in her work. She is honest and reliable, and in this one form of practice, I think, she is better fitted for the position of prophylactic assistant than is a man. (Motley, 1986, p. 25)

The gendered nature of dental hygiene work and the subordination of members of the dental hygiene occupation to members of the dental profession became established at the time of dental hygiene's inception. These two critical factors, entrenched within the patriarchal structure of dentistry, initiated the chronic subservient role of dental hygienists, which continues today.

The numbers of licensed dental hygienists grew slowly, but steadily, in the United States. The professional association of dental hygiene, the American Dental Hygienists' Association, was formed in 1914. By the end of World War II in 1945, dental hygienists were recognized by 48 states. Seventeen dental hygiene education programs had been established. Over the next 30 year period, the occupation of dental hygiene continued to develop as evidenced by an expanding scope of practice, an increase to 200 programs in dental hygiene, and recognition by all states of licensed dental hygienists (Motley, 1986).

The stimulus for the establishment of dental hygiene in Canada originated in the public health sector in the late 1940s. Employment opportunities for dental hygienists in private practice settings followed soon after. Legislation pertaining to dental hygiene as a health occupation was first developed by the Ontario government in 1947. The last
province to adopt legislation was Newfoundland in 1968. The registration of Canada's first dental hygienist occurred in 1949. The greatest growth in the numbers of dental hygienists occurred in the 10 year period between 1975 and 1985, when over 70% entered the workforce. This growth was attributed to a rise in preventive oral health practices and a corresponding need and demand for greater numbers of dental hygiene practitioners to provide preventive care to clients. Numerous dental hygiene programs in central Canada were established during this period (Health and Welfare Canada, 1988). Canadian dental hygienists form a homogeneous population with almost no variation in age (20-30 years old) or gender (98% are female) (Johnson, 1989). More than 90% of Canada's 13,500 dental hygienists are currently licensed to practise dental hygiene (S. VanWart, personal communication, May 12, 1999).

The first Canadian diploma program in dental hygiene was founded in 1951 at the University of Toronto. The Canadian dental hygiene population has grown steadily since its official beginning in 1949. The mid-1970s witnessed phenomenal growth in the establishment of 15 community college-based dental hygiene programs in Ontario and Quebec to produce adequate numbers of health personnel to meet increasing demands for preventive dental hygiene services and address problems of dental hygienist undersupply in central Canada (Health and Welfare Canada, 1988). More than 750 per year graduate from all Canadian programs in dental hygiene (Health Canada, 1992; S. Matheson, personal communication, May 10, 1999). Basic dental hygiene education programs are normally two years in length, with some being three years in length. Academic admission requirements vary across the country from completion of high school to one year of university education. Education in extended dental hygiene care, and continuing education varies from province to province (MacDonald, 1988).

In the majority of cases, responsibility for the development and implementation of dental hygiene curricula rests with dental hygiene educators. In some instances, dental educators (dentists) contribute to curriculum planning and provide instruction to dental
hygiene students. This usually occurs in university settings where dental hygiene programs are housed within dental faculties. Participation by dental educators in dental hygiene education is recognized generally as enhancing the quality of such education. However, there is increasing evidence that where diploma level dental hygiene programs are located within dental faculties, these programs are given low priority, and are being threatened with closure due to diminishing institutional resources. In the case of recent baccalaureate and masters level program closures in the United States, dental hygiene leaders and educators attribute this to organized dentistry's ability to influence the continued subordination of dental hygiene in educational settings. Such closures curtail the growth of dental hygiene research and scholarship, and the cultivation of leaders. As well, these closures prevent the expansion of an educational foundation which is necessary to support a growing interest in non-traditional (autonomous) dental hygiene practice. Subordination is the highest level of dominance that one occupation can exert over another. In the researcher's view, dentistry's efforts to suppress the growth of dental hygiene education beyond an undergraduate degree level is consistent with its attempts to prevent the self-regulation of the occupation. If such efforts are successful, dentistry would maintain direct, authoritative control over the education, practice and regulation of dental hygienists, which would prevent dental hygiene from establishing a legitimate occupational jurisdiction and achieving functional autonomy.

Between the years 1951 and 1968, four university based diploma programs in dental hygiene were initiated in Canada. Presently, 27 diploma programs are recognized by the Commission on Dental Accreditation of the Canadian Dental Association: three are located in universities and 24 in community colleges. The majority of Canadian dental hygienists graduate from Canadian programs. A 1987 census of Canadian dental hygienists revealed that approximately 57% of dental hygienists attended college-based education programs, and 38% have completed university-based programs (Johnson, 1989). A baccalaureate program in dental hygiene, established in the early 1980s, is
offered at the University of Toronto. The University of British Columbia began a degree program in dental hygiene in the fall of 1992. The University of Manitoba and the University of Alberta have received approval for the establishment of baccalaureate programs, and are presently seeking funding to implement them. These baccalaureate programs are designed to meet the need for formally qualified dental hygiene educators, researchers, and senior level managers in community health settings, government, and the dental industry.

The development of organized dental hygiene in Canada began in the early 1960s, more than a decade after the first dental hygienist was registered to practice. All provinces have professional associations of dental hygiene. The larger provincial associations have component societies. Ten provincial constituent member associations comprise the formal structure of the Canadian Dental Hygienists’ Association, the national body representing Canadian dental hygienists. The Canadian Dental Hygienists’ Association was officially constituted in 1965 and incorporated in 1985. Its voluntary membership is approximately 65% of the total Canadian dental hygiene population; non-voluntary is 50%, that is, in four provinces membership is mandated through licensure requirements.

The regulation of dental hygiene in Canada is an area of increasing concern for dental hygienists. Issues such as supervision requirements, portability, or the ability of a dental hygienist licensed to practise in one jurisdiction to practise in another jurisdiction without further examination, and self-regulation are presently being addressed by government and by provincial/national dental hygiene organizations. The means of regulating eligibility for dental hygiene practice are registration and licensure. Licensure is a form of statutory control, while registration is a non-statutory endorsement of competence by an occupational group. Blishen (1991) argues that "state recognition of health occupations through licensure and certification gives them not only a high degree of occupational control, but also a clear recognition that they have a distinctive role to play in the delivery of health care" (p. 98). Dentistry acknowledges the importance of the role of
dental hygiene in oral health care, but is insistent that this role be guided and controlled by the dental profession, at the legislative level and within the workplace. This type of professional dominance permits dentistry to control the division of labor in oral health care and to direct the work of dental hygienists and other dental personnel, thereby, fortifying a hierarchical structure in which dentistry is positioned at the pinnacle. Dentists enjoy an occupational monopoly over related occupational groups in this division of labor.

In five provinces in Canada, dental hygiene has self-regulatory status. Dental hygienists in Quebec were first granted such status in 1975, followed by Ontario in 1987, Alberta in 1990, British Columbia in 1994, and Saskatchewan in 1997 (Health & Welfare Canada, 1988; Smith, 1991; Glassford, 1994; Whelan, 1998). More than 90% of Canadian dental hygienists are entrusted with the governance of their profession, with responsibility for licensing, standards of education, continuing competence of members, quality assurance, complaints, and discipline measures (Wood, 1992). The regulation of dental hygiene in all other provinces and two territories is controlled by dental boards which are also the regulatory agents for dentists. These dental boards are comprised of a majority of dentist representatives, a token number of lay representatives, and typically one dental hygienist member. Manitoba alternates representation between dental hygienists and dental assistants. Prince Edward Island, the Yukon and Northwest Territories have no dental hygienists included on the boards which govern dental hygiene. At present, dental hygiene associations in Manitoba and Atlantic Canada are engaged in efforts to achieve self-regulatory status. In some instances, reviews of provincial health legislation have facilitated these efforts. However, self-regulation does not necessarily ensure functional autonomy for the occupation of dental hygiene unless legislation specifies a greater degree of autonomy for dental hygienists through stated practice acts, by-laws or regulations.

It is possible that with the advent of self-regulating status for dental hygiene, changes to the present supervision arrangements in the workplace will occur. Currently, in most jurisdictions, supervision standards vary depending on whether a dental hygienist is
employed in private practice or community health, even though the dental hygiene care provided may be the same in both settings. Dental hygienists employed in community health settings practise under general supervision in all provinces. Supervision arrangements for private practice settings are more restrictive; that is, direct supervision is required in many jurisdictions. This means the employing dentist is physically present while dental hygiene care is being provided. Direct supervision is a legal and practical mechanism for keeping dental hygienists subordinated to dentists in the workplace, and restricting the ability of practitioners to make independent treatment/care decisions.

Traditional dental hygiene work settings include private practice, community health (federal, provincial, regional and municipal government programs), hospitals and educational institutions. More recently, dental hygiene work settings have expanded to include multi-location group practices, retail centres, correctional institutions, day care and senior centres, union and corporate dental clinics, and research institutions. Approximately 86% of employed dental hygienists work in private dental practice, 9% have community health positions, 4% are employed in educational institutions, and 1% have positions in acute and long-term care institutions, industry, management, consulting, and research. In private dental practice, where the majority of dental hygienists are employed, clinical dental hygiene time is spent on three major service areas: direct clinical care, preventive instruction and therapy, and oral examination (Health & Welfare Canada, 1988).

Several types of practice arrangements for dental hygienists exist and include the categories of employee, self-employed and independent contractor. There are a few independent dental hygiene practitioners located in British Columbia where legislation permits this type of practice. To date, the dental profession has influenced law makers in a direction which has allowed their members to sustain an occupational monopoly over the provision of oral health services. In the United States, legislation in the state of Colorado permits licensed dental hygienists to own and operate dental hygiene practices independent of dentist employment or supervision. A government sponsored pilot project in the state of
California was conducted from 1987 to 1990 to assess the efficacy of oral health care systems provided by independent dental hygiene practitioners to clients who were of low socioeconomic status, were institutionalized, and who preferred dental hygiene care without dentist involvement. The results of this project demonstrated that independent dental hygiene practice was a safe method of providing dental hygiene services to clients, and that independent practice did not present any risk to the public (Perry, Freed, & Kushman, 1994). At the national level, the American Dental Association opposes independent practice by dental hygienists, and claims that safe and effective oral health care can only be delivered if the dentist is at the helm of the oral health team and directs the work of others, thereby, safeguarding the professional dominance of dentistry.

In the early 1980's, the Canadian Dental Hygienists Association began to investigate a process of national certification for dental hygienists, in response to a request from its membership. National certification, as it pertains to health professions, is a mechanism for entry to practice which assures that new practitioners have met specified standards for beginning practice (Walker & Gallagher, 1994). The developmental work to establish a certification process occurred over the next decade. In June, 1994 the National Dental Hygiene Certification Board was established as an independent body at arms length from the Canadian Dental Hygienists Association. The purposes of national certification for dental hygienists are two-fold: to protect the public by providing a mechanism that offers a standardized assessment of candidates for entry into practice, and to facilitate portability of licensure from one licensing jurisdiction to another (Gallagher & Forgay, 1994). The first examination was offered in April, 1996. This recent development reflects dental hygiene's continued efforts in its professional project. National certification for Canadian dental hygienists will enhance the occupation's status and credibility.

The most significant phenomena in the development of dental hygiene since the mid 1940s have been extended changes in the scope of dental hygiene practice and the expansion of dental hygiene world-wide. Dental hygiene practice has been broadened to
include the provision of services such as the administration of local anesthesia and nitrous oxide sedation (not in Canada), advanced non-surgical therapies, placement of orthodontic bands and dental restorations; and the development of advanced skills in oral examination and treatment planning. It is anticipated that the need for dental hygiene services will increase in Canada in future years. At present, the demand for dental hygienists has led to increased student enrollments in some dental hygiene programs. The future need for dental hygiene services will be influenced by a demographic shift to a more elderly population, in combination with an altered pattern of dental disease (lower dental caries rates and an increased need for periodontal care), and an increased awareness by the public of preventive oral health care. As the population ages and older people remain dentate, the demand for dental hygiene preventive and therapeutic services will increase. These services will increasingly be provided in non-traditional settings such as institutions, chronic care facilities, and residential centres for the elderly. The potential for expanded dental hygiene practice, together with less restrictive legislation pertaining to the regulation of dental hygiene, could have an impact upon dentistry's exclusive monopoly over occupational boundaries and the work of dental hygienists.

**Dental Hygiene and Dentistry**

Changes in oral health needs, practice patterns, dental technology, and the educational qualifications of dental hygienists; shifting patterns in the regulation of dental hygiene; greater consumer awareness; and an increased desire by dental hygiene for greater independence have led to breakdowns in the relationships between organized dentistry and dental hygiene. As the organizational structure and practice of dental hygiene are evolving, attempts by dental hygiene to alter traditional, controlled, dominant relations between the occupations have been met with resistance and rigid opposition from dentistry.
The origin of dental hygiene and the influence of socialization on both dental hygienists and dentists, together with the employment and regulatory control of dental hygienists by dentists in most jurisdictions, has produced and perpetuated a paternalistic relationship between dentistry and dental hygiene (Health & Welfare Canada, 1988, p. 149).

The women's movement and the changing relationship between men and women in today's society have influenced gender issues related to the value and contributions made by female dominated health care occupations. Traditional gender stereotyping of women for certain roles is decreasing. These changes have influenced dental hygiene's desire for greater autonomy and professional status than previously permitted by rigid hierarchical structures based largely on gender differences. In short, similar to nursing's relationship with medicine, the sources of conflict between dental hygiene and dentistry include social, cultural, political, technological, educational, and gender issues, in addition to occupational differences.

At individual and institutional levels, traditional relationships between dentistry and dental hygiene have become unacceptable to dental hygiene, as a desire for more egalitarian relations has developed. At the individual level, there is evidence among dental hygiene practitioners of satisfaction with interpersonal relationships with employers, but there is a general expression by dental hygienists of dissatisfaction in their working relationships with dentists. Dental hygienists identify ineffective and poor communication, lack of recognition for educational preparation, the absence of collaboration and colleagueship, and a lack of mutual respect as some of the reasons for poor inter-professional relationships with dentists. In a study of Michigan dental hygienists and dentists, Pritzel and Green (1990) collected data on dental hygiene practice, office procedures, and employer/employee interaction. These researchers discovered that dental hygienists' perceptions of their practice were significantly different from dentists' in several major areas. Most of the
dental hygienists reported that they performed regular clinical examinations, whereas only two-thirds of the dentists reported that hygienists did this procedure. With respect to professional communication, half of the dentists perceived that they provided feedback to hygienists all the time, while only one-third of the hygienists agreed. In determining recall intervals for clients, the majority of the dentists reported that they did this in consultation with the dental hygienist, whereas half of the hygienists stated that they set recall appointments on their own. Pritzel and Green concluded from this study that dentists' perceptions are inconsistent with dental hygienists' in role delineation and client care. That is, while dentists perceive that hygienists have less responsibility than they actually do, hygienists perceive themselves as having greater responsibility than is attributed to them by dentists.

At present, communication at the institutional level, between organized dental hygiene and organized dentistry in the United States is almost nonexistent. This lack of communication is due to differing viewpoints related to standards of education, entry level to practice, supervision requirements, scope of practice, and legislative issues concerning the regulation of dental hygiene. Dentistry wishes to restrict the expansion of all of these areas, and in some instances, reduce existing practices and regulations in an effort to fully dominate and control all aspects of the dental hygiene occupation, so that dental hygiene remains in a subordinate position to dentistry.

Although relations in Canada are somewhat more amicable, they show signs of increasing conflict at the national and provincial levels, primarily in the legal arena. The absence of research studies and substantive literature examining interrelations between dentistry and dental hygiene is indicative of the impasse that exists on many issues of mutual interest. Given the historical subordination of dental hygienists to dentists, and an expressed desire by dental hygiene to improve its occupational status, a study of these perspectives appears to be of some academic importance. Dental hygiene would benefit from a critical understanding of its own history, patriarchal and professional hierarchical
structures, and the sexual division of labor that has become established in the field of oral health care.

In Canada, a census study was conducted which examined the labor force patterns and behaviors of the dental hygiene work force (Johnson, 1989). The typical work setting for dental hygiene practitioners involves one-person or group-operated dental private practice where the employing dentist is male and all other employees, including the dental hygienist, are usually female. This research demonstrates that dissatisfaction experienced by dental hygienists in the workplace is related to a lack of delegated responsibility, including limited opportunities for advancement and recognition for one's professional role. These findings provide some evidence of dentists' control and undervaluation of the work performed by dental hygienists at the individual level.

At an institutional level, dental associations throughout North America continually attempt to halt or reverse activities (self-regulation, unsupervised practise) initiated by dental hygiene organizations in support of professionalization (Allen, Darby, Mounts, Reynolds-Goorey, Secrest, & Turbyne, 1983; Brown, 1987; Brownstone, 1988). McIntyre (1989) states that "both the Economic Council of Canada and the United States Federal Trade Commission recognize the role of dental governing bodies in defining, regulating and controlling dental hygiene practice for their own vested economic self-interest" (p. 188). She argues that dentistry feminized the occupation of dental hygiene for purposes of economic gain and control. The gendered nature of dental hygiene work was created by dentistry, and dental hygiene's lack of autonomy and control over its work prevents this occupation from achieving some degree of professional independence. Blishen (1991) views dental hygiene as a competitive market threat to dentistry. Dentists dominate the market in terms of oral health services. With the exception of denturists who may provide a limited specific form of dental treatment directly to the public, dentists control and monopolize the public market for services. If organized dentistry perceives that dental hygiene may be encroaching on a portion of this economic market, dentistry's
response will be to establish further barriers to this encroachment through mechanisms of deskilling and increased regulation of dental hygiene. Dentistry’s monopoly with respect to market control would be jeopardized if dental hygienists were able to provide direct services to the public outside of the monopoly which dentistry presently holds. Also, dentists’ economic security would be threatened if dental hygiene salaries were significantly higher or if the cost of dental hygiene services was increased.

Modern feminist thought is based on the premise that women’s position in society is influenced greatly by a patriarchal structure and widespread sexism. This assumption of feminist thinking is consistent with dental hygiene’s position vis-à-vis dentistry. The regulation of the occupation of dental hygiene came under the control of organized dentistry, with minimal or no input from dental hygiene. The practice of dental hygiene is a licensed act and eligibility for licensure requires graduation from an accredited dental hygiene education program. Until recently, in spite of the formal qualifications of dental hygienists, the majority were required to work under the direct supervision of a dentist in private dental offices, while all provinces permit general supervision (dentist is aware of dental hygiene care being provided but has not necessarily made a diagnosis) of dental hygienists in community health to some degree. Dentistry claims that such direct and constant control was and is necessary in order to ensure the safety of the public.

With recent regional changes in health professions legislation, such as self-regulation, dental hygienists in several provinces are seeking legislative changes to allow for general supervision requirements in all dental hygiene practice settings. Changes in legislation in several provinces, including Ontario, British Columbia, Saskatchewan and Alberta, have shifted the authority for dental hygiene matters from dentistry to dental hygiene. But patriarchal dominance flourishes in a situation where male dentist employers have legal authority to direct the work of female dental hygienists. The private practice setting is a reinforcing environment for the entrenchment of this type of dominance. Dental hygiene has only recently begun to document the impact of such dominance upon the
occupation. Published accounts of sexism in the workplace are just beginning to appear. Garvin and Sledge (1992) recently reported the results of a U.S. state-wide random survey of female dental hygienists concerning sexual harassment within dental offices. Seventy-three percent of 500 respondents disclosed a personal experience with one or more forms of harassment.

The continued subordination of dental hygiene is advantageous for the dental profession. First, dental hygiene work contributes to dental office productivity and revenues. Second, it allows dentists to delegate routine tasks. Third, it helps to sustain the public's view of the dominance of dentists as primary oral health care providers and the purveyors of all dental care. A usual response to perceived encroachment by one occupation on another is for obstacles to be erected to halt or even reverse professionalization activities. In the case of dentistry and dental hygiene, organized dentistry has resisted encroachment by asserting its social, political, and legal powers in an attempt to protect its territory and professional domain. However, in spite of these efforts, dental hygiene has attained government support for some limited professional control over licensing of its members, educational requirements, and disciplinary matters. In Canada, there is some evidence of diminishing state support for the power of one occupation to govern another, as witnessed by the review of health legislation in Ontario, British Columbia, Saskatchewan, and Alberta (Mickelson, 1993; College of Dental Hygienists of British Columbia, 1994; Whelan, 1998).

Few studies have been undertaken to examine issues pertaining to the predominant number of women within the occupation of dental hygiene, or the nature of the interrelationships between dental hygiene and the male dominated profession of dentistry. Patriarchal powers in the workplace continue to flourish, preventing dental hygienists from gaining functional autonomy and escaping traditional roles. Although dental hygiene has made some gains in its professional endeavors to establish a structural link between level of
education and occupational autonomy, the gendered notion of professions acts as an impediment to achieving full professional status.

**Research in Dental Hygiene**

There is a dearth of literature on the professionalization of dental hygiene. Although publications in dental hygiene contain a few articles, primarily editorials, in support of the professionalization of this occupation, little research has been conducted to examine the occupational status of dental hygiene. However, minimal research in dental hygiene education has looked at professional socialization, a process which converts a novice lay person into a professional expert. Since socialization encompasses the transmission of professional culture to its recruits, an understanding of this process is crucial to any profession, especially to an emerging profession. In the health professions, socialization has been studied extensively in medicine, and to a lesser degree, in dentistry. More recently, emerging professions such as nursing, dental hygiene, and occupational therapy have demonstrated an interest in studying the socialization of their members. Most aspiring professions perceive that the acquisition of professional roles, attitudes, values, and behaviors by their members is a critical element in attaining professional status. A well defined professional identity together with a clear understanding of the values and beliefs about the nature of the professional role, its relationship to other social roles, and to society contribute to the ideology of a profession (Blishen, 1991). However, paraprofessions such as nursing and dental hygiene have only recently begun to evaluate whether or not their educational programs are successful in producing graduates who possess professional attributes such as independence, decision making skills, critical thinking skills, self-confidence, and leadership abilities.

The study of professional socialization over the past several decades has resulted in the development of two predominant sociological theoretical approaches, a variety of
models, and many concepts. Both approaches evolved from comprehensive studies of physician socialization and have had an enduring effect on subsequent research conducted in this area. These theoretical perspectives are referred to as structural-functionalism, informed by structural consensus theory, and interactionism, informed by interpretivism. Proponents of structural-functionalism assert that socialization through education and training, together with careful selection of recruits, determines the content of the professional role. Interactionist theorists posit that situational conditions and adaptive behaviors of students in the educational setting determine the nature of the role (Lurie, 1981). Although both perspectives provide paradigms in which to study professional socialization, they focus on different socialization phenomena, thereby reflecting different views of the crucial elements in the process. However, a principle common to both approaches is that through the complex process of professional socialization, a recruit acquires the knowledge, skills and role identity that are essential to a particular profession (Moore, 1970). An important element not clearly identified are the gendered aspects of this process.

Dental hygiene researchers have studied several dimensions of professional socialization including recruitment/admission processes, agents of socialization, development of the professional role, and anticipatory/prior socialization. The basis of most research on professional socialization in the health care sector is linked to the concept that socialization occurs during several stages. The pre-socialization stage encompasses an extensive time period which ends with the admission of a recruit to a professional training program. It represents the beginning point of formal socialization. Generally speaking, numerous researchers in the health professions have demonstrated that prior socialization has some degree of influence on formal socialization. During this stage, potential professional school candidates develop a lay image about a particular profession (Shuval, 1980). Factors relevant to this stage include background characteristics, career preferences, occupational inheritance, early exposure to professionally relevant
experiences, interests in high school, and professional role perceptions. The next phase of socialization, that is formal preparation, is considered to be the most important stage of professional role development (Blishen, 1991). During this time period, two crucial processes operate to shape and mould the novice into an expert: the transmission of technical knowledge and skills, and the inculcation of professional norms, values, attitudes and behaviors. Study variables pertaining to this phase include agents of socialization, recruitment and admission processes, training for uncertainty, the development of a professional identity (shifts in attitudes), and other issues pertaining to the process of doctrinal conversion. In a continuing phase following graduation from the professional training environment, a few researchers have examined whether socializing factors in the work environment alter the effects of formal socialization.

Wayman (1986), in a study of 141 dental hygiene students at five institutions, collected data on the demographic characteristics of students. The background data collected revealed that: (a) 65% of students had previous work experience in a dental environment. (b) 55% of the students' fathers were professionals. (c) 27% of the students had family members who worked in either dentistry or dental hygiene, and (d) 6% had fathers who were dentists and 1% had mothers who were dental hygienists, demonstrating a low rate of occupational inheritance. It may be that parents, particularly mothers, were dissatisfied with their careers and did not encourage their children to make the same occupational choice. The study results suggest that students felt their school experience was consistent with their expectations of student life, and the professional role requirements placed on students were acceptable to them. Also, for those students who had anticipated their school experience correctly, career satisfaction was high. However, career satisfaction was not influenced by previous work experience. These findings suggest that even though students' prior work experience in a dental work setting may have been negative or unsatisfying, their expectations of career satisfaction remained high. A more recent study of entry level dental hygiene students at the University of North
Carolina-Chapel Hill reported findings contrary to the Wayman investigation (Wassel, Mauriello, Weintraub, 1992). That is, having a family member/friend in the dental hygiene field was found to be the most influential factor in career selection. Other reasons cited for career choice were contact with a dental hygienist, compatibility with student's personality, and a favorable job market.

Sharp (1981) examined shifts in the perceptions held by dental hygiene students by measuring their views of dental hygiene practice. The results of the study demonstrated that students' initial positive image changed to negative as their educational experience increased. Sharp suggests that several reasons for the change may include the personal maturation of students, professional socialization involving curriculum content and clinic experience, and faculty influence over students' imagery of practice.

Kraemer (1990) found that the impact of faculty models made little difference to the professional attitudes and values held by graduates of dental hygiene. Since the influence of faculty members was not as statistically significant as expected in the socialization process, Kraemer postulated that "the dental hygiene educational environment may be so consistent that students acquire certain professional attitudes regardless of faculty intervention" (p. 284). This may be interpreted to mean that graduates are relatively homogeneous in terms of skills and values because dental hygiene programs select, educate and graduate students who are similar in scholastic standing, personal qualities, and values. Or it may mean that, aside from the influence of faculty, other structural factors such as curriculum content or prior socialization might play an important role in a student's development of a professional identity.

Contrary to Kraemer's study, Wayman (1986) showed that faculty members are effective socializing agents when they exhibit little agreement or low consensus on defining the professional role of the dental hygienist. That is, in a learning environment where faculty possess varied perspectives on the professional role, students are allowed to ascertain the nature of this role individually. Wayman concluded "that where faculties are
more varied with respect to role definition, extreme values that are individually imposed on students by faculty do not impair the socialization process" (p. 10). The implication of this finding for dental hygiene education is that it would be beneficial to employ faculty members with varied and contrasting orientations to the professional role. Because of a diversity in role models, the socializing environment naturally becomes a flexible place. Students are not directed to any one particular professional model, but are permitted to internalize the professional role in a non-threatening individual manner. Although studies concerned with faculty models as agents of socialization have demonstrated that teachers do contribute to professional role identity and development, dental hygiene research to date has resulted in conflicting findings on this subject.

Dental hygiene researchers have conducted studies using cross-sectional designs and survey techniques to identify changes in students' attitudes, values and perceptions concerning their professional role (Wayman, 1978; Sharp, 1981; Kraemer, 1986, 1990). Relationships between study variables were determined by means of objective, statistical methods. Although these studies provide some empirical evidence regarding the socialization of dental hygiene students, they lack a theoretical perspective and research design that would permit investigation of undetermined variables and socializing agents in the professional school environment, and the student's perspective on socialization. Despite the fact that the dental hygiene literature contains a few articles in support of the professionalization of this occupation, little research has been conducted to examine the relationship between dental hygiene education and professional practice. Longitudinal studies in dental hygiene should be carried out to explore changes occurring in the socialization process over time. A minimal amount of research has been conducted on the gendered aspects of the process and the socialization of dental hygienists in the workplace. Additionally, studies need to be undertaken to identify differences in professional attitudes and perceptions in associate degree/diploma and baccalaureate level students.
More recently, a Canadian study of dental hygiene examined the perceptions of Alberta dental hygienists and dentists regarding the status of dental hygiene as a profession. Lauter (1993) used attribute theory as a conceptual framework to guide this investigation of the importance of continuing education, baccalaureate level education and specific traits as they relate to the professionalization of dental hygiene. The research methodology included both qualitative and quantitative data collection through the use of focus groups and a survey instrument. Results demonstrated the following: that more dental hygienists perceived dental hygiene as a profession than dentists; more dental hygienists than dentists agreed that dental hygiene should possess attributes of a profession; and that dental hygienists, not dentists, would like to see changes in the level of supervision for dental hygienists. Also, dental hygiene participants stated that the status of dental hygiene as a profession could be raised by increasing the education of dental hygienists to the baccalaureate level, and reducing the power and authority of dentists and the dental profession over dental hygiene. This study was successful in identifying certain attributes which dental hygienists believe are important for raising dental hygiene's professional status. However, it did not serve to uncover the salient features of the culture of dental hygiene nor the complexities of the relationship between dentistry and dental hygiene.

Summary

This review has focused on the literature on professions most relevant to the transformation of a semi-profession to a profession. A very large body of scholarship has been integrated in order to provide a conceptualization of the sociology of professions and professionalization. Theories of professions have been explored which relate to the study of an occupational culture. Although traditional approaches such as attribute theory and functionalism fail to explain the nature of the interdependence of one occupation on another, or power relations, they continue to dominate the research on professions. More
focused studies of professional socialization have relied largely on theories of structural functionalism and interactionism to guide the research in this area. Finally, issues of professionalism and concepts such as, functional autonomy and professional dominance, have been explored in order to conceptualize the important elements contained within the culture of an occupation.

A limited number of quantitative studies in dental hygiene have examined the process of formal socialization in relation to the professionalization of dental hygiene. Findings from these studies are consistent with studies in other health professions in which professional socialization is viewed as a contributing factor in the transformation of a novice person into an expert. Although there has been some recent work in trying to uncover the perceptions of dental hygienists concerning the attributes of the occupation of dental hygiene, no research has been conducted that examines the perceptions of dental hygiene members from the standpoint of the culture of dental hygiene. As a result, there has been minimal theory building which could inform the process of dental hygiene's occupational growth and development. Questions pertaining to the dominance of dentistry over dental hygiene and gender relations and their influence on dental hygiene's professionalization have never been tested. The findings of this study will contribute to a theoretical understanding of the dental hygiene culture and its professional project, and provide a basis for further study of the professional development of dental hygiene.
CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Design

This study, based on a framework of social interactionism, employs a qualitative (exploratory, descriptive and analytical) research design, in which the focus is on understanding phenomena from the subjects' perspectives. The researcher utilized open-ended (face-to-face) interviews and document analysis to explore the perceptions held by participants, in order to conceptualize the status and culture of dental hygiene. The fundamental question directing this research is: "What are the perceptions, beliefs, and experiences of representatives of the dental hygiene community with respect to the professionalization of dental hygiene?" This chapter presents a description of the research design, sample, recruitment and selection techniques, data collection methods, analysis procedures, ethical considerations, and limitations of the study.

A qualitative study design is predicated on an inductive approach to generate data that will be reflective of the phenomena under study (Strauss & Corbin. 1990; Crabtree & Miller. 1992). The positivist research approach, which is based on the natural science model (quantitative design), does not capture the nuances of the lived experience. Instead, the positivist approach is dependent upon studying phenomena as measurable objects, independent of the context in which they operate. The focus of quantitative research is to establish a causal relationship between predetermined variables and to interpret findings from the researcher's perspective rather than the participants' viewpoints (Wilson, 1985). On the other hand, qualitative research is concerned with the meaning, context, and perceptions of the research subjects and situations being investigated. Very little is known about the research topic that was studied, other than assumptions which can be drawn from
the literature and the researcher's own perspective. Under these circumstances, a qualitative research approach is appropriate for gathering data which represent the previously unknown perceptions and meanings held by the study participants. The conceptualization of dental hygiene that evolved is grounded in the data.

The perceptions held by dental hygienists and dental hygiene students are thought to be influenced by career roles and work settings, type of formal education, provincial legislation concerning regulation, provincial dental hygiene practice patterns, as well as interpersonal experiences. In Canada, these factors vary across provinces. Career roles include practitioner, educator, leader/manager, consultant, and researcher. Practice settings vary by role and include private dental offices, community clinics/programs, educational institutions, acute/long-term care facilities, hospitals, federal, provincial and municipal community health departments, and research facilities (Health & Welfare Canada, 1988). While the dental hygiene occupation is self-regulating in British Columbia, Alberta, Saskatchewan, Ontario, and Quebec, it is governed by dental boards in all other provinces (Glassford, 1994; College of Dental Hygienists of British Columbia, 1994; Whelan, 1998). Legislation in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec and Atlantic Canada (Nova Scotia, Prince Edward Island, New Brunswick, Newfoundland) permits dental hygienists to provide services outside the realm of traditional dental hygiene practice, for example, the placement of filling materials, orthodontic procedures, and the administration of local anesthetic.

British Columbia, Saskatchewan, Ontario, and Quebec offer diploma dental hygiene programs in community colleges with varying entrance requirements from direct entry from high school to a pre-professional university year. Ontario’s model of dental hygiene education is different than the rest of Canada. That is, applicants to dental hygiene must hold certified dental assistant status. It is also the only province where the length of the education program in dental hygiene is less than the traditional two years. Manitoba, Alberta, and Nova Scotia have university based diploma programs, also with varying
academic admission requirements. The University of British Columbia and the University of Toronto offer dental hygiene degree completion programs (MacDonald, 1988) which are two years in length. Entrants to these programs must have completed dental hygiene diploma programs.

In order to study the culture and professionalization of the dental hygiene occupation in Canada, this investigation included a representative sample of constituent groups within the dental hygiene community and a comparison sampling of dental hygienists who differed in education, practice, and regulatory factors by province/region. Therefore, the study included a sample of educators, managers/leaders, and dental hygiene practitioners in community health, as well as a smaller sample of dental hygiene practitioners in private practice and students who were identified by means of purposive selection techniques (Crabtree & Miller, 1992). The researcher made three assumptions regarding dental hygiene managers/leaders, educators, and community health practitioners: they are the groups most likely to have first-hand knowledge of the inter-occupational conflict between dentistry and dental hygiene, they have experience in the growth and development of dental hygiene as an occupation, and they are very active in its professional project. Many members of these groups are also well-known to the researcher. Based on these assumptions, dental hygiene managers/leaders, practitioners in community health settings, and educators were selected by the researcher in a purposive manner as key informants, and were supplemented by a random selection of practitioners in private practice and dental hygiene students. Participants were chosen from three provinces and one region which represented variations in dental hygiene practice, education, and regulation. These geographic areas included British Columbia, Alberta, Ontario, and Atlantic Canada.

Different sampling techniques and recruitment strategies were employed. The specific strategy depended on the nature of each sample sub-group. Dental hygiene educators and managers/leaders were identified from provincial/national dental hygiene
association lists and a Canadian educator's directory. These hygienists were invited to participate in the study based on the researcher's personal knowledge of, and association with, these individuals. Participants who were categorized as dental hygiene practitioners in community health settings were determined from computerized membership lists provided to the researcher by national and provincial dental hygiene associations. Participants in this sub-group were invited to be included in the study in the same fashion as educators and managers/leaders. Dental hygiene practitioners employed in private practices were recruited for the study by advertising for volunteer participants through provincial/national association newsletters. They were then selected in a random fashion. Dental hygiene diploma and post-diploma students were recruited by advertising for volunteers at educational institutions with the cooperation of program directors. A sample of students who volunteered to participate was randomly selected. Selection techniques are discussed further in a later section on participant recruitment.

In addition to interviews conducted with a range of sample participants, data sources for this research also included an array of documents selected by the investigator that reflected the occupational status and culture of dental hygiene. These publications include: legislation pertaining to the regulation of dental hygiene, educational standards, practice guidelines, the national dental hygiene constitution, Code of Ethics, and editorials which reflect the viewpoints and perceptions held by dental hygienists with respect to professionalization. Document analysis served as a secondary method of data gathering and enhanced the overall quality and depth of data collection. The data analyses of two selected interviews produced concept maps which served to validate the perceptions held by participants. Memo writing was used as another procedure of data collection and analysis to document the ideas of the researcher during these phases of the study (Strauss & Corbin, 1990). This technique helped the researcher to document the highlights of in-person interviews, make notes about emerging themes, and represented a written form of her
abstract thinking about the data. Memos were referred to throughout the duration of report writing.

In summary, the overall design of the research incorporated strategies of triangulation. The technique of triangulation is used by qualitative researchers to establish the validity and trustworthiness of findings and to add to the investigator’s breadth and depth of understanding (Denzin, 1978; Morse, 1989; Crabtree & Miller, 1992). Triangulation includes the use of multiple data sources, numerous methods of data collection, and multiple theoretical perspectives. Study data sources included: dental hygienists who represented various constituents of the dental hygiene community in various geographic regions with different practice, education, and regulatory patterns; students who were representative of program type and location; notes which mirrored the researcher’s thought processes during data collection and analysis; and documents which reflected the perceptions of official representatives of organized dental hygiene, as well as the status quo regarding dental hygiene regulation, practice, education, and professionalization. Multiple data collection methods (in-person interviews, concept maps, journal and memo writing and document analysis) were utilized and all data were analyzed in a comparative fashion in order to conceptualize the status and culture of dental hygiene. Data analysis was informed by several theoretical viewpoints including early and contemporary theories of professions, neo-Marxist and neo-Weberian models of professionalism, and symbolic interactionism.

Sample

The potential sample population for this study encompassed dental hygiene practitioners in private practices, community health, acute/long-term care institutions, and the Canadian Armed Forces; educators; managers/leaders; consultants; researchers; and
students. The largest sub-group is practitioners in private practice (85%). The next largest sub-group is practitioners in community health and institutional settings (9%). The smallest sub-groups are formed by dental hygiene educators (4%), managers/leaders (1%), and practitioners in the Canadian Armed Forces (1%). At the time this 1996 study was conducted, the total population Canada-wide consisted of approximately 12,000 dental hygienists and 1,380 diploma and degree level students. There were 26 diploma programs in dental hygiene in community college (23) and university (3) settings, and 2 post-diploma baccalaureate programs. The potential total sample population for this study in the selected four provinces/regions of the country numbered approximately 8,000 dental hygienists and 800 students (Health Canada, 1992; Canadian Dental Hygienists Association, 1994a). Practitioners in the Canadian Armed Forces were not included in the study because of relatively small numbers and significant differences from dental hygienists in the private and public sectors with respect to educational preparation, regulation, and practice. Dental hygiene consultants were not considered as potential participants because they were very few in number (less than 10), and there was no available list to identify these individuals. Generally, dental hygiene researchers carry a dual role of educator/researcher and were very small in number (less than 10), and therefore were accessed through the educator constituency.  

In order to tap into the collective culture of dental hygiene, the sample was comprised of representatives of constituent groups (defined by work setting and role) within the occupation and included: dental hygiene practitioners in private practice and community health settings, educators, managers/leaders, and students. The perceptions and experiences of dental hygienists and dental hygiene students with respect to their culture, role identity, inter/intra occupational relations, and professional status were

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1 A language barrier excluded potential participants from Quebec. Manitoba dental hygienists were excluded from the study due to the researcher's long-time close association with most members of the community through practice, education, and administration.
expected to be affected by regional differences in factors such as practice, education, and regulation. Therefore, the sample was drawn from British Columbia, Alberta, Ontario and Atlantic Canada in order to obtain a comparison sampling of differences in these factors.

In British Columbia the dental hygiene occupation became self-regulating in 1994 and it is one of two provinces in Canada that offers a post-diploma baccalaureate degree in dental hygiene at the University of British Columbia. Dental hygiene services are provided under general supervision which means that a client must be examined by a dentist prior to or during the initial appointment with a dental hygienist. Diploma dental hygiene programs are located in three community colleges around the province and admission requirements include one year of university studies. Legislation permits dental hygienists to administer local anesthetic which is outside the realm of traditional practice. British Columbia has a fairly large number of community health dental hygiene positions.

In Alberta, dental hygiene has been self-regulating since 1991, although the practice of dental hygiene remains traditional without an expanded scope. A dental hygiene practitioner works under the direct supervision of a dentist who must be on site while care is being provided. One diploma program is offered at the University of Alberta. The government of Alberta employs a large number of dental hygienists in community health settings. In all provinces of the Atlantic Canada region, dental hygiene is governed by dentistry with minimal representation by dental hygienists on provincial regulating boards. Legislation allows dental hygienists to provide expanded services in orthodontics and restorative dentistry. Dental hygiene care is provided under the direct supervision of a dentist. Very few community health dental hygiene positions exist among all provinces in this region, with the greatest number found in Nova Scotia. One diploma dental hygiene program is located at Dalhousie University which serves the entire Atlantic Canada area. A pre-professional university year is required for entry to the program.

After a ten year effort to achieve self-governance, the dental hygiene occupation in Ontario became self-regulating in 1990. Dental hygienists deliver services upon the "order
of a dentist" which means that dental hygiene care cannot be initiated unless a dentist has authorized the services to be provided for each client. Ontario has a unique model of dental hygiene education which does not exist anywhere else in Canada; it is a career ladder approach. The model consists of a one year compressed program of dental hygiene studies. Entrants to dental hygiene must have certified dental assistant status. More than 10 community colleges in the province offer dental hygiene programs. Legislation permits expanded dental hygiene practice including restorative dentistry and orthodontic services. A substantial number of positions in community health settings are available. The University of Toronto offers a post-diploma degree program in dental hygiene (Health & Welfare Canada, 1988; MacDonald, 1988; Glassford, 1994).

**Characteristics of the Sample**

The characteristics and traits that defined the sample of dental hygiene practitioners, educators, managers/leaders, and students were as follows:

1. **Dental Hygiene Practitioner in Private Practice**: Private practice work settings in urban/rural communities include solo and group (general and specialty) practices, retail centres, and a very few union and corporate dental clinics. Dental hygienists who practise full-time or part-time in any of these private practice work settings were included as the researcher did not believe that significant differences in perceptions exist between practitioners who work full-time or part-time. However, information pertaining to multiple dental hygiene roles, type of employment, and membership status was recorded and considered for comparison purposes during data analysis. For example, practitioners may also hold elected or appointed positions in dental hygiene organizations. The role of practitioner may not be mutually exclusive of other roles such as leader/manager or...
educator. However, a member of this sub-group represented the "grass roots" dental hygienist and traditional dental hygiene practice.

2. **Dental Hygiene Practitioner in Community Health:** A broad definition of "community health" is applied to this study which incorporates provincial and municipal programs/clinics; acute and long-term care institutions, and hospitals in urban and rural centres. Community health practitioners worked full-time or part-time, or had worked in the recent past (five year period) in community health. They represented a cross-section of practitioners who worked in alternative dental hygiene settings outside of private dental offices.

3. **Dental Hygiene Educator:** Educators were limited to current and/or recent past (five year period) dental hygiene program directors of diploma and post-diploma baccalaureate programs in both community college and university settings. Program directors, rather than faculty members, are in the best position to provide information on dental hygiene curricula, program philosophy, and formal professional socialization. Also, program directors typically are exposed to inter-occupational conflicts between dentistry and dental hygiene, and are concerned with professionalization. They may have had combined roles of educator, practitioner, and manager/leader which was accounted for during analysis of the data. The role of dental hygiene educator is considered to be non-traditional.

4. **Dental Hygiene Manager/Leader:** Dental hygienists in this sub-group are not clearly defined in the literature. For the purposes of this study, this sample provided a cross-section of dental hygiene's leadership and included: current and/or recent past (five year period) presidents of national/professional dental hygiene associations, registrars of licencing authorities, national/provincial executive directors of dental hygiene organizations, and national/provincial committee chairpersons in dental hygiene associations. Dental hygienists in management/leadership positions hold key roles with respect to their understanding of, and contribution to, the professional project of dental hygiene. They are involved in dental hygiene's professionalization at economic, legal,
political, and social levels and often provide the impetus for change within the occupation. Dental hygienists in management/leadership positions normally hold some power and authority to take action. Their perceptions of the culture and professional status of dental hygiene are central to this study. These positions are considered to be non-traditional.

5. **Dental Hygiene Diploma and Degree Level Student**: In order to achieve a cross-section of diploma dental hygiene students by program type and setting this sub-group included senior students in community college programs and university programs (accredited by an external agency, the Commission on Dental Accreditation of Canada) with varying academic entrance requirements. Accreditation is sought on a voluntary basis and accreditation status acknowledges minimum program standards in dental hygiene education. Only diploma students in their senior year were included in the study as the researcher assumed that the length of their educational experience would lead to greater insights and more well developed perceptions of dental hygiene than those of junior students. Post-diploma baccalaureate students at the University of British Columbia and the University of Toronto (accreditation not offered) were also included. Diploma students are prepared for entry to practice, while degree completion students are prepared to assume dental hygiene positions in community health and educational institutions. Diploma programs are normally two years in length and post-diploma degree programs are an additional two years in duration, resulting in a longer process of professional socialization for degree level students.

In short, the sample for this study was composed of sub-groups which were defined by traditional and alternative work settings and varying dental hygienist roles. The sample was representative of the constituent groups within the occupation of dental hygiene and reflected regional variations in practice, education, and regulation. The researcher is confident that the sample reveals both similarities and differences in the perceptions and
experiences held by various constituent members of the community with respect to the occupational culture and status of dental hygiene.

Sample Size

The sample was drawn from specific provinces and one region of the country based on a comparison sampling of factors pertaining to dental hygiene education models, regulation of the occupation, and practice patterns, and reflected the constituent groups of the occupation. National statistics that have been previously cited with respect to dental hygiene population size (Canada-wide and in specific regions) do not identify the size of particular constituent groups, that is, practitioners in private practice and community health, educators, and managers/leaders (Health Canada, 1992). However, data regarding population size for dental hygienists employed in private practices and community health settings were available through the Canadian Dental Hygienists Association 1994-1995 membership data base (CDHA, 1994a), and were accessible to the researcher. Population statistics are also published on diploma level dental hygiene students, educators, and managers/leaders. A review of these statistics provided the researcher with information on the breakdown of constituent dental hygiene groups by region which was used to determine the parameters of the sample and sampling strategies (Table 3.0).
### Table 3.0

**Population of Sample Sub-Groups by Province/Region**

<table>
<thead>
<tr>
<th>Sample Sub-Group</th>
<th>B.C.</th>
<th>Alta.</th>
<th>Ont.</th>
<th>N.S.</th>
<th>P.E.I.</th>
<th>N.B.</th>
<th>Nfld.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.H. in Private Practice (a)</td>
<td>778</td>
<td>870</td>
<td>2681</td>
<td>293</td>
<td>18</td>
<td>170</td>
<td>52</td>
<td>4,862</td>
</tr>
<tr>
<td>D.H. in Community Health (b)</td>
<td>27</td>
<td>69</td>
<td>36</td>
<td>16</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>152</td>
</tr>
<tr>
<td>D.H. Diploma Educator (c)</td>
<td>3</td>
<td>1</td>
<td>11</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>D.H. Degree Educator (d)</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>D.H. Manger/Leader (e)</td>
<td>12</td>
<td>22</td>
<td>23</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sub-Total 5,110</td>
</tr>
<tr>
<td>D.H. Diploma Student (f)</td>
<td>60</td>
<td>40</td>
<td>266</td>
<td>41</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>407</td>
</tr>
<tr>
<td>D.H. Degree Student (g)</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sub-Total 419</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total 5,529</td>
</tr>
</tbody>
</table>

**Note**  
D.H. = Dental Hygiene

(a)(b) Provincial statistics from the 1994-95 Canadian Dental Hygienists Association data base with the exception of Alberta. Alberta data obtained from the Alberta Dental Hygienists Association. All statistics based on dental hygienists who are members of provincial/national dental hygiene associations. Address lists of dental hygiene practitioners employed in community health by province were accessible to the researcher from the Canadian Dental Hygienists Association and the Alberta Dental Hygienists Association.
(c) Data gathered from the 1994 Canadian Dental Hygienists Association Educators Directory. Membership status is unknown, but it was assumed by the researcher that educators are members. Names, addresses, and phone numbers of educators were available through this Directory.

(e) Statistics collected from 1995 national and provincial dental hygiene association directories of officers, appointees, and committee chairpersons (included names, addresses and phone numbers).

(f) Data source for this sub-group was Health Canada (1992) which included statistics on health personnel in Canada. Student membership status is unknown.

(g) Statistics gathered by the researcher's personal contact with dental hygiene degree program directors. Membership status of students is unknown.

The sample was determined on the basis of achieving a predominant mix of dental hygiene managers/leaders, educators, and community health dental hygienists (key informants), and a smaller selection of private practice practitioners and students, as defined by the sample characteristics (work settings and roles). The researcher's assumptions with respect to key informants, and regional diversity amongst the potential sample population regarding factors of dental hygiene education, practice, and regulation were considered in defining sample size.

In qualitative research, sampling is concerned with information richness and is driven by a need to illuminate the study questions (Crabtree & Miller, 1992). Morse (1989) suggests that the qualitative principles of purposive sampling involve selecting those informants who are best able to meet the informational needs of a study and who are articulate, reflective, and willing to share information with the researcher. Additional qualities of a good informant include: being knowledgeable about the topic under study, having first hand experience about a subject or currently experiencing the topic being researched, and being able to reflect and provide detailed experiential data about a particular phenomenon. Conversely, a poor informant would be an individual who offers only
superficial information or exaggerates their experience in order to hold the attention of the researcher.

A "key" informant is distinguished from other informants because of her position in a culture and her relationship to the investigator. This relationship is usually one of long duration, occurs in a variety of settings, and is more intimate. Generally speaking, suitable study informants are well enculturated and active within their own culture so that they can accurately represent that culture to the researcher. The selection of a purposive sample attempts to produce a small number of informants who would normally offer representative knowledge of the research topic within the study population. Crabtree and Miller (1992) state:

The strategies of sampling to the point of redundancy or theoretical saturation, of searching for disconfirming evidence, and of maximum variation sampling have implications for sample size that should be considered in qualitative research design and implementation. Although the rules are not hard and fast, experience has shown that 6-8 data sources or sampling units will often suffice for a homogeneous sample, while 12-20 commonly are needed when looking for disconfirming evidence or trying to achieve maximum variation (Lincoln & Guba, 1985; Marshall & Rossman, 1989; McCracken, 1988; Patton, 1990). (p. 41)

In this study, the researcher was confident that selected key informants (dental hygiene educators, managers/leaders, and community health practitioners) who were known to her, and who held core positions within the community of dental hygienists would provide rich insights into the occupational status and culture of dental hygiene. Hence, greater numbers of key informants (33) were selected in comparison to non-key informants (16) for this national study of dental hygiene. At a cognitive and experiential level, the perceptions held
by key informants were certain to reflect the dimensions of dental hygiene's professional project.

A purposive sample of 33 key informants (dental hygiene managers/leaders, educators, and community health practitioners) was selected for this investigation and included:

- 8 practitioners in community health ([2] each from British Columbia, Alberta, Ontario, and Atlantic Canada; including practitioners in government based programs, acute/long-term care institutions, and hospitals);
  The selection of educators represented the range of program type and location; and
  In addition, 16 dental hygiene practitioners in private practice and students were drawn randomly from a pool of 155 volunteers and specifically included:

- 8 practitioners in private practice ([2] each from British Columbia, Alberta, Ontario, [1] from Nova Scotia and [1] from Prince Edward Island). This selection of practitioners ensured regional representation as well as a comparison of factors affecting dental hygiene culture and status; and
8 students ([6] diploma level senior students and [2] degree completion level students). In order to obtain a “representative” sample of students based on program type, location, and region, 2 students were selected from community college diploma programs in British Columbia and Ontario, 1 each from a university diploma program in Alberta and Nova Scotia, and 1 each from university degree completion programs in Ontario and British Columbia.

The sample for this study involved 49 participants who were purposefully selected to meet the goals of the research project; 48 participants were ultimately included in the study. Proportionately, two-thirds of the sample was comprised of key informants and one-third of non key-informants. The researcher anticipated that participant refusal rates and potential attrition levels would be very low, if not negligible. This assumption was based on two facts: the researcher's colleagueship with selected key informants and her previous experience in gaining the cooperation of dental hygienists and dental hygiene students for the purposes of conducting research or working collaboratively on professional programs/projects of similar interest. To ensure the desired sample size was attained, given the expectation of a very low refusal/drop-out rate, the researcher identified a minimal number of additional participants in each sample sub-group, that is, 1-6 per sub-group dependent on the sample size requirements of each group. These participants could serve as a replacement for any participant who declined an invitation to participate in the study or who dropped out of the study. They were selected in the same fashion as all other participants. There were no replacement participants used in the study.

Although 49 participants was the proposed sample size for this study, one diploma community college educator could not participate due to inclement weather on the day of the scheduled interview in Thunder Bay, Ontario. This participant was removed from the sample and not replaced for two reasons: the fact that all of the other 48 selected participants were included in the study and the expense of scheduling another in-person interview outside of the researcher's home province.
Sampling Strategies

Different sampling strategies were utilized in this study and involved purposeful selection methods (Crabtree & Miller, 1992). Purposeful sampling requires that the researcher can directly access and deliberately select a sample which is defined by specific criteria. A primary purposive sample of dental hygiene educators, managers/leaders, and community health dental hygienists was appropriate for the goal of this study in that the perceptions and experiences of these key informants were critical to the conceptualization of the status and culture of dental hygiene. A major sampling issue in qualitative research design relates to the "representativeness" of the sample, that is, the question of selecting a sample that is representative of the culture, role, or position needed for a particular study (Morse, 1989).

In this study, the researcher made use of her professional background and experience to define the sample of key informants. The researcher's own position as a dental hygiene program director and her active membership in several dental hygiene organizations, which included elected/appointed positions in provincial, national, and international professional associations, allowed her direct access to potential key informants. Potential informants were chosen by the researcher based on her awareness of the participants' backgrounds, experiences, and their perceived willingness to share information and insights concerning the dental hygiene occupation. Another factor considered in the sampling process was the residence of participants, that is, whether or not they lived in remote locations that were difficult to access and costly to reach. Generally, informants who lived in urban centres or near urban areas were selected. The purposive key informant sample chosen for this study was relatively small in size, with all sub-groups combined. The potential sample of key informants to draw from was also small (Table 3.0). The names, addresses and phone numbers of individuals in the potential sample were accessed by the researcher from professional association lists and directories. A purposive selection of key informants was made by the researcher based on the previously defined
sample characteristics and sample size. The researcher personally knew the majority of the participants selected for this purposive sample.

A purposive selection of a smaller sampling frame of dental hygiene practitioners in private practice and diploma and degree level students was drawn from a larger pool of potential participants. These recruits were invited to participate in the study on a voluntary basis, having met the defined criteria for these two sample sub-groups. The potential dental hygiene practitioner volunteer sample was comprised of relatively large numbers (both provincially and regionally) totalling 4,862. Similarly, the potential student population was also considerable and numbered 419. Given the substantial numbers of individuals in each of these sub-groups, the fact that the researcher did not have personal knowledge of these individuals, and the required smaller sample size of 8 dental hygiene practitioners and an equal number of students; a systematic random sampling strategy was employed for the selection of participants in these sub-groups (Morse, 1989).

Given the generally high participatory rate of dental hygienists in dental hygiene research, the investigator anticipated that a substantial number of volunteers would display interest in this study. For instance, a realistic expectation of this interest may have amounted to anywhere from 50 to a few hundred volunteers per province/region, depending on the subgroup. To address the matter of selecting a small number of participants in each category from a large pool, the researcher constructed a list of eligible volunteer participants in each sub-group, determined a sampling interval, and made selections until the sample size requirements had been met (Wilson, 1985; DePoy & Gitlin, 1994).

In summary, a purposive sample of dental hygiene educators, managers/leaders, and dental hygiene practitioners in community health and private practice, and students was drawn for this study. Educators, managers/leaders and community health dental hygienists comprised the primary sampling frame (n=33) and were identified as key informants. A smaller secondary sample of dental hygienists in private practice and students (n=16) was
systematically selected to augment the data collected from key informants. These participants were seen to be somewhat less knowledgeable and experienced with respect to dental hygiene's professional project, but nonetheless, are an integral component of its culture. Their inclusion in the study would contribute to this investigation of dental hygiene's culture and status.

**Participant Recruitment and Selection**

Different strategies for participant recruitment were employed for sub-groups of key informants and non-key informants. Recruitment methods were determined based on the population size of sample sub-groups, the anticipated cooperation of designated individuals who were asked to assist in recruitment (e.g. program directors, professional association presidents, and association newsletter editors), and whether key informants or non-key informants were being sought. Potential participants were contacted in writing by the researcher to request their participation in the study. They were provided with a description of the criteria for the selection of study participants and a description of the study including: the purpose, methods of data collection, anticipated length of time participants would be required to commit to the study, and ethical considerations (Appendix B). The researcher phoned each potential participant a few weeks after mailing this information and asked whether or not she would volunteer to be in the study. All of the selected key informants agreed to participate in the study. At that time, a date and time for an in-person interview were arranged. Confirmed study participants were sent an informed consent form (Appendix C) to sign and these were returned to the researcher prior to the arranged interview date. All of the participants indicated that they wished to receive a summary of the results of the study.
Key Informants

The names, addresses, and phone numbers of the potential pool of key informants were available to the researcher. Dental hygiene managers/leaders were identified from national/provincial dental hygiene association member lists. Dental hygiene educators were determined from the Canadian Dental Hygienists Association Educators Directory (CDHA, 1994b). The CDHA also provided the researcher with computerized member lists of dental hygiene practitioners employed in community health, with the exception of those practitioners in Alberta, whose names are unavailable to the national association. These names were given to the researcher directly by the Alberta Dental Hygienists Association. All lists were reviewed, and participants were purposefully selected according to previously described sampling strategies.

Non Key Informants

Dental Hygienists in Private Practice

The potential study population of dental hygiene practitioners in private practice was very large in number (4,862). Given the size of this pool, these informants were recruited in two ways: through an advertisement placed in provincial/national association newsletters/journal, inviting volunteers who met the characteristics of this sample subgroup to participate in the study; and by distributing the same advertisement to attendees at provincial dental hygiene professional association meetings through the cooperation of provincial presidents (Appendix D). In the latter process, interested dental hygienists were asked to leave their written responses (tear off portion of advertisement) in a collection box prior to leaving the meeting. These were returned to the researcher at her expense. The same follow-up and selection procedures described for participants recruited through newsletter advertising applied under these circumstances. Dental hygienists who were interested in the study were asked to contact the researcher in writing and to include their name, address and phone number (tear off portion of advertisement). The number of
hygienists who volunteered for the study was as follows: British Columbia, 37; Alberta, 6; Ontario, 15; and Atlantic Canada, 26.

The researcher constructed a list of potential participants by province/region as responses were received and then made selections using a systematic random sampling process (DePoy & Gitlin, 1994; Crabtree & Miller, 1992; Wilson, 1985). For example, 3 dental hygiene practitioners in private practice from British Columbia were required for the study (oversampling by 1) and 37 practitioners volunteered; the determined sampling interval (sampling fraction) was 3 : 37 or 1 in 12. The random number of 2 was selected between 1 and 12 to determine the first person in the sampling frame to be selected, and then every twelfth person from the starting point was selected for the study. The majority of respondents resided in urban centres. Again, the researcher made a decision to limit the selection of participants to those individuals who lived in or near an urban location. Therefore, if one of the randomly selected dental hygienist participants lived in a remote location, the researcher chose the next participant from the sampling list who resided in a city or near a city. A decision was also made to limit participants from the Atlantic Canada region to those from Nova Scotia and Prince Edward Island. This was due to the fact that the majority of volunteers from Newfoundland and New Brunswick lived in areas that were difficult and costly for the researcher to access.

Selected participants were sent a written description of the study (Appendix E). Participants confirmed their participation by phone and in-person interviews were arranged. Informed consent forms (Appendix C) were signed and returned to the researcher prior to arranged interview dates. Participants who were not selected for the study were notified in writing of their status and thanked for their interest (Appendix F).

Students

The researcher was confident that she could gain the cooperation of dental hygiene diploma and degree completion program directors in disseminating written information
about the study directly to potential student sample populations. The researcher contacted directors by phone to determine their willingness to approach senior student groups in their programs. Most of the directors are known to the researcher, and several of them had been selected themselves as a key informant for the study. In this case, the researcher did not believe that the recruitment process was biased because the director simply distributed written information to students and did not discuss it with them. If a director agreed to the researcher’s request for assistance, they were provided with copies of the advertisement for recruitment (Appendix D) for distribution to students. It was suggested to the director that the advertisement be given to students at a time when they were assembled as a group such as during a classroom or laboratory period, so that all potential students were contacted.

Interested students were asked to leave their written responses (tear off portion of advertisement) in a collection box. These were returned to the researcher at her expense. The number of diploma (community college) students who volunteered for the study included 24 from British Columbia and 24 from Ontario. Diploma (university) students numbered 5 from Alberta and 12 from Atlantic Canada. The number of degree students who expressed an interest in the study included 4 from British Columbia and 2 from Ontario.

The procedures used for the selection of student participants in the study were consistent with those used for the recruitment of dental hygienists in private practice. The names, addresses, and phone numbers of students (by province/region and program) who contacted the researcher expressing an interest in volunteering for the study were placed on a list in order of response. Student selection requirements were met through the use of a systematic random sampling process described in the previous section. The majority of respondents resided in urban centres. Potential participants from Alberta lived in Edmonton or very close to it, and students in Atlantic Canada all lived in or near Halifax. However, the researcher made a decision again to limit the selection of participants in British Columbia and Ontario to those who lived in or near a major urban location.
Therefore, if one of the randomly selected student participants lived in a remote location, the researcher chose the next participant from the sampling list who resided in an urban centre such as Vancouver or Toronto. Selected participants were sent information on the details of the study (Appendix E) and then were contacted by the researcher in a few weeks time to confirm their participation in the study. At that time, arrangements for in-person interviews were made. Each participant returned an informed consent form (Appendix G) to the researcher prior to their interview date. Students not chosen for the study were informed in writing (Appendix F).

Data Collection Methods

In qualitative research, triangulation refers to the use of multiple data sources and multiple data collection strategies (Crabtree & Miller, 1992). The use of triangulation techniques in this study added detail and depth to the findings and assisted in establishing validity, that is, verifying that the data collected are true or accurate. The basic premise of triangulation is that by using more than one approach, the imperfections of one source or method will be counteracted by the strengths of another and that the use of multiple strategies will result in congruent findings (Denzin, 1978). Data sources in this study consisted of comparative data collected from key informants (leaders, educators, community health practitioners), "grass roots" dental hygienists in private practice, and students, as well as from published documents. The primary method of data collection was in-person interviews. A secondary method was document analysis. These methods were supplemented with concept mapping, which is a visual presentation of the connections between data that has been categorized through analysis. Maps were constructed from the interview data. Concept mapping allowed the researcher to verify that her interpretation of interview data was reflective of the information provided by participants. Data acquired through interview procedures were verified through document analysis and vice versa.
Interviews

Qualitative research studies often employ unstructured or semi-structured interviews (Morse, 1989). Unstructured interviews are the equivalent of guided conversations and are carried out with little or no organization (Morse, 1989; Crabtree & Miller, 1992). Semi-structured interviewing is designed around specific areas of interest, but allows for flexibility in scope and depth (Polit & Hungler, 1987). Such interviews are open-ended communication events. Questions are written in the form of a flexible interview guide (Crabtree & Miller, 1992; Lofland & Lofland, 1984). Interviewing technique is a critical element of effective interviewing for the purpose of data collection. Seidman (1991) recommends several interviewing strategies, some of which include: listen more, talk less; ask questions when you do not understand; explore, do not probe; avoid leading questions and ask open-ended questions; keep participants focused; avoid reinforcing your participants' responses; follow your hunches; explore laughter; and tolerate silence. The researcher made every effort to utilize these strategies.

The researcher conducted 48 interviews over a seven month period during three separate trips that occurred in the following sequence: Ontario, Atlantic Canada, British Columbia and Alberta. This scheduling was based on the availability of the participants as well as the researcher's own commitments. The date, time, and location (participant's workplace or researcher's hotel room) of each interview were arranged at the convenience of participants. Prior to the commencement of an interview the researcher reviewed the purpose of the study, informed the participant that she may take notes and not to be distracted by this, and offered the participant an opportunity to ask questions about the study or the interview process. All interviews were audio recorded and transcribed following the interviews. One of the interview tapes was found to be blank during transcription. The reason for this remains undetermined. Each session was approximately 60 to 90 minutes in length, in consideration of both the researcher's and the participant's energy levels. All participants were interviewed once and two participants (for whom
concept maps were created) were interviewed twice, once in-person and once via a telephone conversation. One week following the completion of an in-person interview, each participant was sent a "note of thanks" by the researcher for their involvement and cooperation in the study.

A semi-structured interview format was employed to carry out individual in-depth interviews with dental hygienists and dental hygiene students. An open-ended interview guide of core questions served as the basis for interviews with all study participants. Additional questions were asked of participants in each sample sub-group in order to draw out perceptual and experiential differences related to informants' work roles and practice settings (Appendix H). The questions were formulated on the basis of the purpose of the research and the conceptual framework. The assumptions of symbolic interactionism related to symbolic meanings, self-concept/role taking, cultural norms and symbols, development of attitudes and values, and reflective thought guided the development of the interview questions.

The interview guide was piloted with a colleague prior to the first participant interview. This individual was asked to provide feedback on the questionnaire concerning the clarity and complexity of the questions. Although no changes were made to the guide after their review, the researcher did alter four of the questions after the first two interviews were completed in order to make them less ambiguous. For example, a part of question number four on the interview guide in its original form read, "What ideas and objectives do you think are characteristic of the culture of dental hygiene?" Participants questioned the meaning of the word "culture". For greater clarity this statement was modified to read, "What ideas do you think are characteristic of the "art and science" of dental hygiene? For example, what do hygienists know, what are they like, what do they do, what knowledge and behaviors do they possess?" This revision facilitated participants' response to the question.
The flexibility of an open-ended interview allowed the researcher to uncover the perceptions, thoughts, beliefs and experiences of the study participants through the eyes of the participants, and to explore the data as they emerged from the interviews. During the interview process the researcher used paraphrasing/questioning techniques, referred to as "member checks" to verify that her understanding and interpretation of participants' comments were accurate (Guba & Lincoln, 1989). The following excerpt from an interview with one participant illustrates the researcher's use of questioning and paraphrasing techniques.

Researcher: Can you tell me what your image of a dental hygienist is?

Participant: I feel that it's a professional who's working as a member of a team who's taking care of the oral health of that person in that practice. I see myself as not the main person in the ... as the dentist has the final say....

Researcher: Why do you feel that way?

Participant: Because I feel that I'd like to know that I've got somebody in the office. If there's a problem, I'm not sure about something....

Researcher: How would you define a dental hygienist?

Participant: I think it's a professional person.

Researcher: What does that mean to you?

Participant: To me there is an ethical responsibility.... It's this air of professionalism.... If the job takes an extra hour that's fine....

Researcher: So, in thinking about the professional role of the dental hygienist then, that person for you would be somebody who is committed (Participant 13, Private Practice Practitioner)

Participants had an opportunity to correct errors, question the researcher's interpretations, and expound on information already provided. Other reliability issues which were considered during interviewing included the comfort of the interview environment, participant fatigue, and the dependability of the recording equipment used. When the researcher conducted an interview at the workplace of a participant, she asked that the interview room be a quiet space without access to others. The taperecorder used for
interviewing was tested at the beginning of every interview day to ensure it was in working order.

During the data collection process and throughout the study, the researcher kept a journal of her thoughts, confusions, and understandings of personal, methodological, and analytic dimensions of the research (Crabtree & Miller, 1992). For example, during each in-person and telephone interview the researcher briefly documented what she considered to be the essence of participant’s perceptions. During the data analysis phase of the study she returned to these notes and compared them against the detail of the themes that arose from the data. This process contributed to the validity of the findings. In another example, after the researcher had read all of the interview transcripts twice, and before the coding process began, she recorded brief statements about her thoughts on patterns that appeared to be emerging from the data. Two examples of such statements were “descriptions of the role of the dental hygienist vary from physical descriptions to relationships with other professionals” and “dental hygiene may not have determined its uniqueness”. This type of recording and reflection assisted her in understanding the effects of her own perceptions, values, and experiences on the research process. It enabled the researcher to set aside her own preconceptions in order to consider the study phenomena from the perspective of the participants (Lipson, 1991). She often referred back though her journal as data analysis proceeded in an attempt to confirm/disconfirm or expand on these original thoughts which may have been transformed into conceptual themes.

Document Analysis

Documents are sources of data. They may include, for example, diaries, books, letters, newspapers, legal documents, and reports (Wilson, 1985). Document analysis may confirm, disconfirm, or extend findings derived from other data sources or data collection methods. Document selection is based on the overall purpose of a study and related research questions (Morse, 1989). The analysis of documents, as a method of data
collection, is in keeping with the concept of symbolic interactionism. According to Charon (1989), symbolic interactionists often use "nonreactive" techniques, such as analyzing content in written materials to understand peoples' perspectives and actions without having direct contact with them.

In this study the researcher chose documents based on the views of individuals and provincial/national perspectives which appeared to her to articulate a range of perceptions of members of the study population and organized dental hygiene with respect to the status and culture of the dental hygiene occupation. Collectively, the documents encompassed official publications of the Canadian Dental Hygienists Association, legislation on the regulation of dental hygiene in a self-regulating and non-self regulating province, and editorials authored by official representatives of the CDHA from the period 1990-1995 (see Appendix I for analyzed documents).

The content analysis of all documents was undertaken by means of systematic coding, categorization, and interpretation. This process is discussed in the section on data analysis. The researcher conducted a comparative analysis of these data with data collected through interviews. Two documents Dental Hygiene: Definition and Scope - Draft and Canadian Dental Hygienists Association Mission/Vision Statement - Draft, were revised since the fieldwork phase of this study. The investigator reviewed the latest version of these publications and found that there were no significant content differences (CDHA. 1995b; CDHA. 1999a).

**Concept Mapping**

Strauss and Corbin (1990) describe a concept as a label placed on discrete happenings, events, and other instances of phenomena" (p. 61). Concepts are the principal building blocks of theory. They may be concrete in nature or abstract. Concepts are defined in terms of their relationship to other concepts (Wilson, 1985). Open coding of data is the analytic process by which a researcher identifies concepts. A conceptual map
provides a visual presentation of the relationship among variables in a study. Wilson states that "the conceptualization required for map making results in a logical and organized model, accurately depicting your research" (p. 267).

The researcher constructed concept maps for the first study participant in each of the community health practitioner (Participant 2) and diploma educator (Participant 5) sample sub-groups (Appendix J). The maps were developed by reviewing each of the two transcripts and creating an illustration of each participant’s conceptualization of the status and culture of dental hygiene. These two transcripts were the first of each sub-group to be coded. The time lapse between the completion of transcript coding and the second interview with the participants was six weeks. Each concept map presented a visual depiction of data coding and the relationship between themes and categories, and was supplemented by detailed data from the coded transcripts. The researcher validated the map with the participant in a phone conversation, to confirm that the map truly reflected the informant’s perceptions of dental hygiene. The participant received the concept map two weeks prior to the arranged phone conversation so that she had an opportunity to review and reflect on it. The length of each conversation was approximately 30 minutes. The researcher asked each participant to discuss the concept map in terms of the "truthfulness" and "accuracy" of the displayed categories and sub-categories.

Concept mapping was carried out so that the researcher could be confident in the accuracy of her analysis techniques for data generated during the early phase of data analysis. If errors in analysis were identified they could be addressed in a timely fashion before proceeding to complete data analysis. The process of concept mapping also enabled the researcher to refine and add depth to the categories emerging from the data. Participant 2 (Community Health Practitioner) stated “the map captures what I said in an organized fashion... no disagreement.... the emphasis placed on defining dental hygiene by comparing it to dentistry was important and very true”. The other informant responded to the concept map by stating “the picture makes logical sense and the categories appear
suitable" (Participant 5, Diploma Educator). This participant also questioned the meaning of the category *Dimensions of Professional Project*. She agreed with the researcher's explanation that this category represented dental hygiene professionalization. As phone interviews with the two participants selected for this process confirmed that data analysis reflected their thinking and their experience in matters pertaining to dental hygiene, no further mapping was deemed necessary.

**Reliability and Validity Issues**

In qualitative research, reliability and validity refer to matters of credibility, dependability, confirmability (Crabtree & Miller, 1992), and transferability (Lincoln & Guba, 1985). Morse (1989) claims that the most critical aspect of validation in qualitative research is "concurrent pragmatic validation", a process by which the researcher "establishes the standards or rules against which the data are verified as being true or accurate" (p. 159). Concurrent validation is usually achieved through "triangulation". Measures of triangulation that were taken to ensure the validity (trustworthiness) of the data included: (a) gathering of data from two sources; key informants (dental hygiene managers/leaders, educators, and community health practitioners) and non key informants (private practice practitioners and students) (b) three data collection methods; interview, document analysis, and concept mapping as well as a researcher journal, (c) careful transcription of audio taped interviews, and (d) member checks which involved paraphrasing techniques that were used for clarification purposes. Members of all constituent groups that comprise the dental hygiene community were represented in this study of dental hygiene.

Reliability issues in qualitative research pertain to the consistency, stability, and repeatability of the informants' accounts and the researcher's ability to gather and record information correctly (Morse, 1989). These issues were addressed in the study through the following strategies/methods: (a) limiting the length of the interview to avoid participant
and researcher fatigue, (b) ensuring a comfortable environment for the interview, (c) testing recording devices for faultiness prior to interviews, (d) asking all informants identical core questions covering the same content to establish the consistency of answers (interview guide), (e) use of concept maps to test the reliability (clarification of content) of the recorded data, and (f) use of a purposive sample which is representative of the larger population to support transferability of findings.

In considering the credibility of participants (dental hygienists and dental hygiene students), the researcher questioned whether or not the informants have reason to lie or conceal what they think is the truth. Wilson (1985) suggests that "an alternative strategy for dealing with questions about credibility is to accept the philosophical position that an individual's statements and descriptions of events are indications of his or her personal reality and unique perspective and should be studied and interpreted as such" (p. 415). Lofland and Lofland (1984) state that most researchers have both trust and some degree of suspicion concerning the truthfulness of participant responses. These authors also claim that when participants are interested in the research topic and have no apparent reason to not tell the truth, then the researcher should assume that they are being honest. Morse (1989) states that "with increased trust comes more candid conversation" (p. 65). In this study, the researcher believed that the informants had an interest in the topic as it concerns their own profession and its future direction, and it is anticipated that they will benefit from the findings of this study. The investigator felt that the participants would be truthful during the interviews. Key informants and non key informants willingly shared their knowledge and thoughts.
Data Analysis Procedures

**Constant Comparative Analysis**

The constant comparative method of data analysis was employed in this study to compare, in a systematic fashion, every piece of data to every other piece of data (Glaser & Strauss, 1967). This method "is concerned with generating and plausibly suggesting (but not provisionally testing) many categories, properties, and hypotheses about general problems" (Glaser & Strauss, p. 104). Constant comparative analysis is achieved in four stages: (a) comparing incidents or events applicable to each category, (b) integrating categories and their properties, (c) describing theory, and (d) writing theory. A transcriber was employed to transcribe 48 interview tapes in full, as well as prepare the study documents in the same format. After the interviews were transcribed, the researcher listened to interview tapes while reading the transcripts because both were essential for a complete and varied analysis of the data (Strauss & Corbin, 1990). This process allowed the researcher to check the transcripts for accuracy and to detect any subtleties not evident from the transcripts (for example, laughter, pauses, or voice inflection). The transcripts were separated by sample sub-group and organized in binders. Transcription, review of the transcripts by the researcher, and data analysis procedures were completed during the time period January, 1996 to November, 1998.

Qualitative research techniques developed by Strauss and Corbin (1990) were utilized to analyze data derived from interviews and documents. An open line-by-line coding process was employed to break down, evaluate, compare, conceptualize, and categorize data. Each line of a transcript was numbered for easy reference to specific parts of the data. Observations, incidents, indicators, descriptive words or phrases, and events were identified (using a highlighter pen) during open coding to facilitate the labeling of data into categories. These categories were further grouped by similar features into sub-categories and their properties. Once categories were established by the researcher,
patterns or themes were identified. As data analysis progressed and became more refined, a few of the categories and themes named early in the analysis process, were changed. For example, the major theme *Development and Profile of Dental Hygiene* was first labelled 'Identity of Dental Hygiene'.

Data analysis began by open coding of the first interview transcript in each of the five sample sub-groups. This was done so that the researcher could acquire a "comparative sense" of the data across sub-groups and the emerging categories before continuing with data analysis. At the same time, two concept maps were constructed based on interviews of two key informants. The content of the maps was compared with categories arising from the transcripts, as well as being validated through second interviews. Concurrently, six documents (secondary data source) were coded and compared with coded data from the transcripts and the concept maps. The researcher also referred to the notes she had recorded during the in-person interviews relative to the recurring ideas, thoughts, and perceptions communicated by the participants. In this fashion, the accuracy and reliability of the emergent data categories were confirmed across data collection sources.

The next phase of data analysis involved coding of the remaining 42 interview transcripts. The researcher chose to systematically complete coding procedures by analyzing all the transcripts of one sample group before proceeding to the next. She began this process by coding all transcripts in the key informant sample sub-group, community health practitioners. Again the researcher compared the results of this analysis with those of the other data sources cited above. No new categories or themes were discovered. Based on these results the data analysis process was modified. In each of the remaining sample sub-groups, 75% of the transcribed interviews were coded and analyzed, while ensuring that these interviews were inclusive of participants from every province/region. For the other four sample sub-groups (Managers/Leaders, Private Practice Practitioners, Educators and Students) analysis was concluded when saturation was reached. This
occurred after analysis of 75% of the interview transcripts in each sub-group. In total, all of the document transcripts and 38 of 47 interview transcripts were analyzed.

The researcher made use of "sensitizing concepts" related to issues of professionalism as she investigated and analyzed the data (Appendix A). These concepts contributed to her awareness, understanding, and interpretation of the findings. Background information collected on participants (member/non-member of professional association, full-time/part-time employment, dental hygiene role, place of employment, length of career) were considered during analysis of the data to determine if there were significant differences or similarities in the perceptions of members of each of the sample sub-groups.

Journal or memo writing served as another procedure of data analysis. Strauss and Corbin (1990) state that memos are "written records of analysis related to the formulation of theory" (p. 197). A memo represents the written form of the researcher's abstract thinking about data. Memoing begins at the inception of a study and continues until the final writing is completed. Memos assist the researcher in gaining analytical distance from the data. They develop conceptually in complexity, depth and accuracy as the research and analysis progress. Some specific features of memos include: (a) they are kept separate from data; (b) they are written immediately when an idea occurs; (c) they are modified as researcher ideas are modified; (d) they are kept at a conceptual level; and (e) they are labeled with a category or categories it describes, a reference, and a date (Strauss & Corbin, 1990; Wilson, 1985). In this study, memo writing was used by the researcher during the analysis phase to articulate ideas and document repeated themes or patterns as they emerged from the data. For example, one memo written at the beginning of data analysis stated "both participants referred to the impression left on them by their dental hygiene teachers". One of these participants was a recent graduate and the other had graduated from dental hygiene 30 years ago. As data analysis proceeded, this statement was repeated over and over by participants. It ultimately led to a category named Learning Dental Hygiene., and
findings related to the importance of teacher role modeling in dental hygiene education. The constant comparative method's requirement of documenting one's ideas, increased the likelihood that the conceptualization of dental hygiene's status and culture was well integrated and clear, as the researcher was forced to make theoretical sense of each comparison (Glaser & Strauss, 1967).

There were very few negative cases or anomalies which arose from the data during data analysis. Such cases are identified by evidence of incidents, events, ideas, perceptions or other phenomenon that do not support, or run contrary to, the emerging analysis (Wilson, 1985; Strauss & Corbin, 1990). Anomalies in the data do not necessarily negate study questions or statements, but rather add variation and depth of understanding to the analysis. Once such negative case was encountered during the analysis of transcripts of diploma students. One student, unlike any other student participant, expressed extreme dissatisfaction with the quality of her dental hygiene education and the effectiveness of her instructors in teaching her dental hygiene. However, during the interview, this student was able to identify a specific set of personal circumstances which contributed to her perceptions of her education. This anomaly added to the researcher's understanding of students' experiences and their potential impact on the development of the professional self-concept.

**Reflexivity and Insider Research**

Ethnographers have considered the notion of "insider research" as it pertains to the researcher-informant experience. An insider refers to one who has knowledge and/or experience and some association with informants and/or the study setting. Informants often hold perceptions of an interviewer's or observer's cultural background and personal attributes (Morse, 1989). Such perceptions may influence what informants think the interviewer or observer will understand, and how informants act (reactivity). Similarity of researcher-informant backgrounds can be advantageous or detrimental, depending on the
situation and the individuals/group involved. The controversy over insider research centers around such issues as ease of entry, common understanding and language, and subjectivity (Aguilar, 1981). Entry to a study setting can be facilitated by being an insider. Morse (1989) claims that even without a language barrier, there are some things which an informant can communicate only to a researcher of similar background. Conversely, some informants will be more open if they perceive an investigator as an "outsider".

Subjectivity on the part of the researcher may create selective listening and influence what will be seen and understood. Although the "insider" may have a similar background to informants which facilitates an understanding of the data, this may cause the nuances of the data to be overlooked (Scanlan, 1994). It is more difficult for an insider to be objective in the research setting. However, if the researcher acknowledges the insider perspective, then he/she can be sensitive to related research issues, and can develop strategies to overcome them. Once this occurs, the richness of data collection is enhanced and interpretation of the data is facilitated (Morse, 1989). Lipson (1984) claims that study of a peer group has several advantages including ease of entry, previous knowledge of some important research questions, and an increased ability to obtain in-depth and rich data.

The idea of "reflexivity" in qualitative research considers self-awareness approaches or strategies which may be employed to minimize the negative effects of the insider-informant experience and maximize the researcher's understanding of the impact of the insider role. Reflexivity requires the insider researcher, as the research instrument, to examine critically any preconceptions and assumptions that may influence data collection, as well as any other factors of personal bias and feelings that may affect the research process (Morse, 1989; Crabtree & Miller, 1992).

In this study, several measures were taken to ensure that the effects of the insider role were kept in check. First, the researcher documented her beliefs and assumptions (Chapter One) about the research topic prior to the onset of the research. She remained cognizant of these during data gathering and analysis. Second, a reflective journal was
kept by the researcher throughout the research process in which ideas, fears, mistakes, feelings and other personal experiences and thoughts were recorded. This journal allowed the researcher to confront her subjectivity during the study and to understand the impact of her own values, beliefs, and experiences on the research. Third, "member checks" were utilized to verify that the researcher had correctly understood the meaning of the data collected. The researcher asked questions and used a paraphrasing technique during interviews to verify informant responses. A further "check" occurred when the investigator conducted phone interviews with selected participants to validate concept maps constructed after data collection. By employing these strategies, the investigator responded during the course of the study and through the writing stage, to any harmful effects resulting from an insider's perspective. The benefits of the insider role of the researcher were realized during data gathering. She had access to data sources such as name and address lists of potential participants. Also, she was known to many of the key informants and was easily able to gain their cooperation to participate in the study. Secondary data sources such as CDHA documents were readily available to the researcher because of her own involvement in the organization.

**Ethical Considerations**

Ethical approval for the conduct of this study was obtained from the Ethical Review Committee of the Department of Sociology, University of Manitoba. Ethical issues in qualitative social research, and particularly in interviewing, are concerned with the need to balance the positive outcomes of scientific discovery against possible risks to the participant. Since interviewing may provoke self-reflection and considerable self-disclosure among informants, the researcher must take measures to ensure that the sometimes vulnerable position of a participant is not exploited and harmful to them (Morse, 1989; Seidman, 1991). The use of informed consent is both ethically and methodologically
desirable in order to safeguard the informant's basic right of self-determination; the right not to be harmed; the right to full disclosure; the right of privacy, anonymity, and confidentiality; and the right of withdrawal (Wilson, 1985; Seidman, 1991).

Research participants who have the right of self-determination will feel free from constraint and coercion. The researcher should avoid using coercive language in letters of introduction and consent forms. The right of not being harmed includes physical, emotional, legal, financial, and social harm (Wilson, 1985). The risk-benefit ratio must be disclosed to informants before they agree to participate in a study. The assessment of this ratio requires an estimate of the projected importance of the study (Archbold, 1986). The right to full disclosure means that misleading participants, either by withholding information about a study or by providing inaccurate information, is unethical. Right of privacy allows a study participant to think and act without interference, or to risk the chance that their behaviors or thoughts may be used to embarrass them. A study is considered anonymous when the findings cannot be associated with any one individual. Anonymity of participants is maintained by substituting code numbers for names on all research materials, and by keeping a master list of informants under lock and key. The names of study sites should also not be revealed (Seidman, 1991). Wilson (1985) states that confidentiality in research means "that any information that a subject divulges will not be made public or available to others" (p. 70). The confidentiality of data sources can be maintained by not allowing people other than the principal researcher to have access to the data. Study participants have the right to withdraw from a study at any time during the research process including a specified time after data collection and during data analysis. They also have the right to withhold any portion of interview data they choose.

In this study, participants were provided with a letter of introduction from the researcher which included information on the participant selection process, data collection methods, expected time commitment to the study, ethical considerations (confidentiality) and a request to participate (Appendices B and E). Once participants agreed to be in the
study, they were provided with an informed consent form that adhered to the elements described previously (Appendices C and G). The researcher avoided using coercive or persuasive language in both the introduction letter and the consent form.

In order to reinforce the participant's right to full disclosure, the researcher explained the purpose of the research to each participant prior to the beginning of each interview. Further, the participant was given the opportunity to ask the researcher questions at that time. Additionally, member checks and concept maps were employed to ensure the accuracy and correct understanding of the data collected from participants. The reciprocal relationship between the researcher and each informant makes the informant more vulnerable to self-disclosure, resulting in information being shared with the researcher that may not be shared with other people. Because the investigator is an "insider" and could understand the informants' experiences, she may have unintentionally elicited data that informants would not share in other circumstances. The researcher managed this situation by being sensitive to participants' cues and sharing information with the informants concerning the thrust of the interviews. Another issue related to role conflict (insider versus researcher) is that informants may confuse the investigator's researcher status with the insider's other roles. As a result, an informant may attempt to interact with the researcher on the basis of the researcher's professional background. When this issue arose a couple of times during interviews, the researcher reminded the informant of her purpose for conducting the interview and hence redirected the focus of the interview.

The issue of confidentiality in qualitative research is concerned with the participants' right to know how information from a study will be shared with others, and how participant confidentiality will be managed. In this research, procedures to protect the confidentiality of the informants included checking with the participants to determine if they agree with the researcher's interpretation of the data, disguising the identity of participants, distorting non-relevant case material, and scheduling interviews at the participant's convenience (Archbold, 1986). Access to interview data (tapes and transcripts) was
restricted to the researcher, the individual transcribing the audio tapes, and members of the researcher's advisory committee. Audio tapes, transcripts, and consent forms will be kept in a locked cabinet until completion of the research project.

Informants will be acknowledged in the study as a group and will be recognized for their contribution to the outcomes of the research. The researcher does not perceive that there are any risks for those who participated in this study as the investigator has no influence over the employment situation of participants. Participants were apprised of the potential benefit of the research, particularly for dental hygienists in leadership positions and for organized dental hygiene in general. Dental hygiene education and dental hygiene practice will also benefit from a conceptual understanding of the dental hygiene culture. Due to the relatively small size of sample sub-groups in this study and the characteristics of the sample, complete anonymity of individual participants probably cannot be assured and therefore anonymity wasn’t offered. However, each participant was asked whether she would consent to their employment/student position being identified for the purpose of enhancing analysis of the data collected. A few of the participants asked the researcher to consult with them if a reference to their position was incorporated into the research report.

**Limitations of the Study**

The relatively small number of study participants and the qualitative research design of this study limit generalization of the findings to the dental hygienists and dental hygiene students who participated in this research. This investigation offers a first systematic step in researching and understanding the complexities of the status and culture of dental hygiene from the perspectives of the dental hygiene community itself.

Symbolic interactionism, the conceptual framework for the study, does not address all dimensions of understanding and learning (Musolf, 1992). Despite this, questions that may address other aspects of the culture and occupational status of dental hygiene are
outside the boundaries of this research. As such, the relevance of the findings of this study are limited to those experiences and perceptions that arose out of the participants’ interaction with the self and with others.

Qualitative research analysis is based on the investigator’s interpretations of the data. However, the experiences and biases of the researcher in this interpretive process must be accounted for during data collection and analysis. While measures such as member checks and the use of a researcher journal were employed to address these research issues, other interpretations of the data must be recognized. Nevertheless, the possibility of alternative interpretations does not detract from the importance of the study findings.

Further research will be required to determine the applicability of these findings to other members of the dental hygiene profession and to other professional groups who may have an interest in the occupational status and practice of dental hygiene, for example, dentistry.

Summary

This chapter has presented details of the research design and methods used in the study. Issues related to participant recruitment, sampling strategies, data collection methods and data analysis have been addressed. Ethical considerations surrounding this study were considered. Although there are limitations to the study, and further research is needed to determine the applicability of these results to other dental hygienists, the findings presented in the next two chapters disclose the perceptions of dental hygienists and dental hygiene students with respect to the status and culture of dental hygiene.
CHAPTER FOUR

FINDINGS: STUDY PARTICIPANTS AND THE CORE THEME - DENTAL HYGIENE IN TRANSITION

The purpose of this study is to conceptualize the culture and occupational status of dental hygiene in Canada from the standpoint of selected members. The primary source of data was derived from in-person interviews supplemented by a review of documents relevant to the research questions. The perceptions of dental hygienists within each constituency of the community were explored. Participants included representatives of private practice, community health, dental hygiene education, student populations, and management and leadership positions. The data were voluminous and in the interest of parsimony, a selection of key themes that related to the research questions was made. An open coding data analysis process, as described in Chapter Three, led to the identification of one core theme and four related major themes. The findings relative to these themes are presented in this and the next chapter. An interpretation and analysis of the findings is found in Chapter Six. Throughout the interviews, there was one pervasive undercurrent, that of change in the dental hygiene occupation and in dental hygienists themselves. This undercurrent is presented as the core theme and titled Dental Hygiene in Transition. Closely connected to this core theme are four related major themes that describe change in relation to the status and growth of dental hygiene (Development and Profile of Dental Hygiene), inter-occupational relationships (Relationships Between Dental Hygiene and Dentistry), professionalization (Dimensions of the Professional Project of Dental Hygiene), and education (Dental Hygiene Education).

As a means of organization, the core and major themes are presented separately. However, the dialectical nature of their relationships can be clearly seen in Figure 4.0. This figure represents the findings of the study and the nature of the interactions between
and among the core and major themes. The core theme *Dental Hygiene in Transition* is strategically placed in the centre of the figure with arrows connecting it to each of the major themes, illustrating the importance of change to each of these themes. In turn, arrows returning from each of the major themes to the core indicate that the relationship is bidirectional in nature. The circle and the arrows in the circle depict the connectivity and influence of one major theme upon another, for example, the development and profile of dental hygiene is related to the professional project of dental hygiene and relationships between dental hygiene and dentistry have impacted dental hygiene education. The key role played by gender in every theme is represented by the broken arrows. As seen in Figure 4.0 each major theme includes various categories. These categories, together with sub-categories are discussed in the next chapter.

![Figure 4.0 Conceptualization of Dental Hygiene](image)

This chapter begins with a description of the participants in the study including sample sub-group/residence, years of dental hygiene work experience, year and place of
graduation, other education, and involvement in professional dental hygiene associations. The remainder of the chapter is devoted to a discussion of the core theme Dental Hygiene in Transition. This theme is described in relation to dental hygiene's occupational development and relationships with other professions, the knowledge and skills of hygienists, and dental hygiene practice.

**Description of Study Participants**

A purposive sample of 48 participants including dental hygiene educators, managers/leaders, and practitioners in community health and private practice, and students (diploma and degree) from five Canadian provinces were interviewed. These provinces represented variations in dental hygiene education, practice, and regulation. Smaller numbers of participants were selected from the Atlantic Canada provinces combined, than from each of the other provinces. Place of residence for these participants was merged under the heading of Atlantic Canada. This regional classification also assisted in protecting the identity of individuals in two Atlantic provinces with few participants, that is, Nova Scotia and Prince Edward Island. British Columbia, Alberta, and Ontario remained as separate provinces. Each of the various participant categories as noted above was identified as sub-groups for the purpose of analysis. A summary of background information on these participants can be found in Table 4.0. Key characteristics of the participants within each sub-group are presented.
### Table 4.0

**Description of Study Participants by Sample Sub-Groups**

<table>
<thead>
<tr>
<th>Sample Sub Group</th>
<th>Location</th>
<th>Total No. of years in Dental Hygiene</th>
<th>Range in Year of Graduation from Dental Hygiene</th>
<th>Place of Dental Hygiene Graduation</th>
<th>Other Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.H. in Private Practice (n=8)</td>
<td>Ontario n=2, Alberta n=2, B.C. n=2, Atlantic Canada n=2</td>
<td>Range=1-32, Mean=15.5, Median=17</td>
<td>1964-1994</td>
<td>University n=5, Community College n=3</td>
<td>Diploma/Certificate n=3 Bachelors n=2 (1 student) Masters n=2 Ph.D. n=0</td>
</tr>
<tr>
<td>D.H. in Community Health (n=8)</td>
<td>Ontario n=2, Alberta n=2, B.C. n=2, Atlantic Canada n=2</td>
<td>Range=4-29, Mean=15.8, Median=15</td>
<td>1965-1987</td>
<td>University n=5, Community College n=3</td>
<td>Diploma/Certificate n=3 Bachelors n=3+1 student Masters n=2 Ph.D. n=0</td>
</tr>
<tr>
<td>D.H. Manager/Leader (n=16)</td>
<td>Ontario n=5, Alberta n=3, B.C. n=6, Atlantic Canada n=2</td>
<td>Range=5-43, Mean=20.2, Median=21</td>
<td>1952-1990</td>
<td>University n=15, Community College n=1</td>
<td>Diploma/Certificate n=2 students Bachelors n=10+3 students Masters n=7 Ph.D. n=1+1 student</td>
</tr>
<tr>
<td>D.H. Diploma Educator (n=6)</td>
<td>Ontario n=3, Alberta n=1, B.C. n=1, Atlantic Canada n=1</td>
<td>Range=13-22, Mean=18.7, Median=19</td>
<td>1958-1976</td>
<td>University n=5, Community College n=1</td>
<td>Diploma/Certificate n=1 Bachelors n=6 Masters n=3+2 students Ph.D. n=0+2 students</td>
</tr>
<tr>
<td>D.H. Degree Educator (n=2)</td>
<td>Ontario n=1, B.C. n=1</td>
<td>Range=30-35, Mean=32.5</td>
<td>1960-1965</td>
<td>University n=2, Community College n=0</td>
<td>Diploma/Certificate n=0 Bachelors n=1 Masters n=2 Ph.D. n=0</td>
</tr>
<tr>
<td>D.H. Diploma Student (n=6)</td>
<td>Ontario n=2, Alberta n=1, B.C. n=2, Atlantic Canada n=1</td>
<td>N/A</td>
<td>N/A</td>
<td>University n=2, Community College n=4</td>
<td>Diploma/Certificate n=3 Bachelors n=1+1 student Masters n=0 Ph.D. n=0</td>
</tr>
<tr>
<td>D.H. Degree Student (n=2)</td>
<td>Ontario n=1, B.C. n=1</td>
<td>Range=5-21, Mean=13</td>
<td>1971-1990</td>
<td>University n=1, Community College n=1</td>
<td>Diploma/Certificate n=1 Bachelors n=0 Masters n=0 Ph.D. n=0</td>
</tr>
</tbody>
</table>

*Note:* D.H. = Dental Hygiene
Sample Sub-Groups

In total, 48 female dental hygienists and dental hygiene students were interviewed. Sample sub-groups were defined by work setting and role. These sub-groups included dental hygienists working in private practice, in community health, as managers and leaders, and as diploma and degree educators. Students were divided into two categories, degree and diploma. Degree students were graduates of dental hygiene at the diploma level and had returned to school to complete baccalaureate dental hygiene programs. As seen in Table 4.0 the deliberate oversampling of Managers/Leaders resulted in a 2 to 3 times larger sub-group in comparison to the other sub-groups.

Almost all participants in the study were employed in some type of dental hygiene practice setting, with the exception of diploma level students. Half of these students had worked in either a dental or health related occupation prior to entering a dental hygiene diploma program. The degree students studied part-time and worked part-time in the field. The majority of interviewees, irrespective of sample sub-group and location, had experience in more than one dental hygiene role throughout their careers. For example, participants who were identified as part of the manager/leader group were often employed as educators and were either in private practice or employed as community health practitioners. Similarly, educators and community health dental hygienists had previous or current experience in private practice. However, very few private practice participants had occupied more than one dental hygiene role during their careers. Although these private practice practitioners had less experience in multiple dental hygiene roles such as educator and manager, they were able to offer valuable insights into the complexities of the occupation.

Years of Dental Hygiene Work Experience

Overall, participants in this study had substantial part-time and full-time work experience in dental hygiene. There was minor variation in the mean number of years
worked by dental hygienists; the mean ranging from 13 to 20 for most sample groups. This figure is consistent with the fact that dental hygiene in Canada is a relatively young occupation and the workforce is stable with a low attrition rate (Johnson, 1989). The one exception to this was the dental hygiene degree educators (n=2) with a mean of 32.5 years of work experience. These educators were selected because of the knowledge and experience they possessed based on their lengthy involvement in dental hygiene. In the largest sub-group of manager/leader, full-time employment dominated. With few exceptions, managers/leaders had made a lengthy commitment to their chosen occupation, together with having broad experience in multiple dental hygiene roles. Those individuals who resided in Ontario had worked in dental hygiene for the longest time. This is most likely related to the fact that Ontario was the first province to recognize this occupation through legislation in the 1940's.

Private practice practitioners had the highest rate of part-time employment, ranging from one to 32 years. Participants in this group represented the opinions, beliefs and experiences of novices, as well as long-time, experienced dental hygienists. Full-time work was the norm for community health practitioners, which is consistent with the most common type of employment arrangement in community health work settings. Two degree students, respectively, had five and 21 years of dental hygiene work experience prior to returning to school, and continued to be employed in the field during their education. Diploma and degree educators had the highest rate of full-time employment, averaging 22.1 years of work experience per participant with a range of 13 to 35 years of work. This sub-group paralleled the manager/leader group in terms of participants' involvement in multiple dental hygiene roles. The educators also exceeded the total number of years of dental hygiene work experience across sample groups with equal numbers of participants; 177 years as compared with 124 for private practice practitioners and 109 years for community health dental hygienists. The higher degree of work experience of the educators was
reflected in more knowledgeable and sophisticated responses regarding the multiple facets of dental hygiene.

Year and Place of Graduation from Dental Hygiene

Most of the dental hygienists in the study graduated in the early part of the 1970s and during the 1980s. Several participants within the educator and manager/leader sub-groups had been educated during the 1960s. One manager/leader participant completed her dental hygiene program in 1952 outside of Canada, one year prior to the first graduating class in Canada. As it is quite common for educators and leaders to be career-track individuals and long-time members of the dental hygiene community, it is not surprising that participants in the manager/leader and educator sub-groups were found to be early graduates. Generally, those dental hygienists who were in practice positions, either private practice or community health, were graduates of the late 1970s, and 1980s.

On the whole, participants graduated from dental hygiene programs which were located in the same region as their current residence. This finding is similar to the results of the only census study of dental hygienists in Canada which found that the dental hygiene population was relatively stable in terms of migration (Johnson, 1989). That is, in comparing hygienists’ province of first registration with their region of current registration, little variation was noted. It appears that dental hygienists tend not to move from one province to another. This might be explained by the fact that, in the past, employment opportunities were plentiful and dental hygienists didn’t have to relocate in order to find work.

Of particular interest is the observation that approximately three quarters of all the dental hygienists attended university based dental hygiene programs, while one quarter graduated from community college programs. This finding is contradictory to the fact that during the mid 1970s and into the 1980s, there was a shift in dental hygiene education from university based programs to community college based programs, a pattern which remains
today (Health and Welfare Canada, 1988; CDHA, 1997). It appears that in spite of this shift, many of the participants who had graduated during these years had sought a university dental hygiene education, while most of the dental hygiene diploma students were registered in community college programs. All but two people in the manager/leader and educator groups combined attended university programs in dental hygiene, while private practice and community health practitioners graduated from university and community college programs in almost equal numbers. The study of professions over time, has continued to cite university based education as a critical element in the formation of a profession and in the development of the professional person (Greenwood, 1957; Millerson, 1964; Freidson, 1970, 1994; Johnson, 1972; Turner, 1987; Willis; 1989; Macdonald, 1995). The fact that the majority of participants graduated from university dental hygiene programs might be related to their own professional aspirations, or the status normally associated with university versus community college diplomas or degrees, or their desire to pursue further university education beyond the Diploma in Dental Hygiene.

Other Education

Participants were generally well educated. Half of the individuals in the private practice practitioner sample group held either certificates, diplomas, or degrees in addition to the Diploma in Dental Hygiene. This is noteworthy as the minimum legal requirement for entry into dental hygiene practice Canada-wide is graduation from an accredited diploma dental hygiene program at the post-secondary level. Five of eight community health practitioners held diplomas/degrees in addition to their dental hygiene education; two of which were at the masters level. All of the educators in the study were qualified at the degree level; many had masters degrees and several were doctoral students. Similarly, 11 of 16 managers/leaders had additional education; primarily baccalaureate and masters
degree qualifications. For these participants, higher education has led to positions in which they have been able to promote the professionalization of dental hygiene.

**Involvement in Professional Dental Hygiene Associations**

In two of the five provinces in which participants resided (Alberta and Nova Scotia), membership in the professional association at the provincial level is a requirement for dental hygiene licensure. At the time of this study, all but one of the participants, a diploma dental hygiene student, were members of their provincial and the national dental hygiene associations. As voluntary membership at the national level is approximately 65% of the total Canadian dental hygiene population (C. M. Worobey, personal communication, June, 1995) the overall membership rate of the dental hygienists in this study was quite high. Ten managers/leaders, two degree students, six educators, four community health and four private practice practitioners also held dental hygiene and related memberships in local and international organizations.

All the dental hygienists who participated in the study had held, or currently occupy, a volunteer position(s) in a dental hygiene professional association or in a related health organization. The positions ranged from President of a provincial/national association, to committee membership, to involvement on a local health board. Dental hygiene diploma students were not involved in volunteer positions, due to the time commitment required for their studies, but each one did belong to her provincial dental hygiene association.

**Summary**

All of the participants in the study were women. This is consistent with the fact that 98% of Canadian dental hygienists are female and 2% are male (Johnson, 1989). The largest sample group was manager/leader, with all others being relatively equal in numbers.
Managers and leaders comprised the majority of key informants selected for the study and were representative of a large cross-section of hygienists holding both paid and volunteer positions in settings such as professional organizations and regulatory agencies. Generally, there were few variations found in the characteristics of the members within sample sub-groups, and between groups. Place of residence did not appear to affect factors related to participants' backgrounds. Many commonalities existed among the participants whose involvement in dental hygiene ranged from one to 43 years. Generally, the background of the dental hygienists in the study was very similar concerning experience in dental hygiene roles outside their primary place of employment, place of dental hygiene graduation, additional academic qualifications, and their involvement in organized dental hygiene. The one existing variation was that diploma dental hygiene students had no active involvement in a dental hygiene association outside of membership in comparison to all other participants.

The characteristics of the study participants previously described such as the length of one's career, the geographical location of their education, and their work roles will continue to provide a framework for the continuing discussion of the core and major themes which will be described in the remainder of this chapter and in Chapter Five.

**CORE THEME - DENTAL HYGIENE IN TRANSITION**

The core theme, *Dental Hygiene in Transition*, was pervasive throughout the interviews as dental hygienists and students spoke of their own experiences and understanding of various facets of dental hygiene. This core theme also emerged during the course of document analysis. While every dental hygienist and dental hygiene student communicated their perceptions of the current status of the dental hygiene occupation, they stressed the changing nature of multiple facets of dental hygiene. They expressed their views of this transformation in the dimensions of occupational growth, knowledge/skills,
relationships with other health occupations with particular reference to the changes occurring between the professions of dentistry and dental hygiene, and dental hygiene practice. Participants stated that dental hygiene began to witness unprecedented shifts in these areas during the past decade. For the most part these shifts were oriented towards a positive forward direction. This section will provide a general overview of the dimensions of dental hygiene perceived to be in transition. A more detailed discussion of these dimensions will be presented in the next chapter as they relate to the major themes identified by participants in the study.

**Occupational Development**

The development of the dental hygiene occupation was viewed as being in significant transition. According to the participants, this transitional period has been propelled largely by changes in the regulation of dental hygiene, as well as other factors. Participants perceived that self-regulation was raising the occupational status of dental hygiene, as well as impacting on its culture and its members. That is, self-regulation was viewed generally as increasing the professional self-concept of individual dental hygienists and promoting a positive self-image within the occupation.

*The decision was to go for self-regulation and I think prior to that though, I'm not sure how many hygienists would have thought of themselves as a professional in the way that they maybe do now.* (Participant 7, Manager/Leader)

Participants also referred to the growing autonomy of dental hygiene, as governments were beginning to recognize the role of dental hygienists in health care through legislative changes which shifted the responsibility for the regulation of this occupation from dentists to dental hygienists. Many participants cited examples of independent dental hygiene practice as a sign of upward occupational growth. They associated this with self-regulatory status. For the first time in dental hygiene's history, independent practice was permitting direct public access to dental hygiene services, particularly for those people in underserviced areas. One community health practitioner in
British Columbia stated that independent practice and self-regulation would improve the self-esteem of dental hygienists because of increased responsibilities and opportunities. Another community health practitioner claimed that these two factors would improve the public’s image of dental hygiene and alter the behaviors of ‘subservient’ dental hygienists.

I think together they will push dental hygiene down that professional road in the public’s eye.... I think it will push hygienists who are meek and quiet and have been subservient in the past to thinking about - that they actually are a profession. When you see your colleagues absorbing more risk and responsibility just through the mere sort of ownership of a practice or through the ownership of a College of Dental Hygienists and a set of by-laws to which you are legally responsible to live up to. You know people will simply rise to that challenge and become what they are expected to become. (Participant 48, Community Health Practitioner)

A private practice practitioner from Nova Scotia equated dental hygiene self-regulation with greater freedom from dentists. Participants from Atlantic Canada acknowledged that, despite the fact that dental hygiene had not been granted self-regulatory status in this region of the country, members of professional dental hygiene organizations in this area had sought government support for this change. In fact, most participants raised the matter of the importance of state sanction for changes to dental hygiene’s occupational status. In this instance, the state was viewed as giving dental hygiene the ‘authority’ to govern itself. Dental hygiene was beginning to use the political process to achieve change.

Changing Roles

In addition to changes brought about by dental hygiene self-regulation, dental hygienists and students in this study believe that reforms in the health care system will lead to future opportunities for expanded dental hygiene roles (e.g., researcher, manager) and work settings (e.g., home care), and an increase in community services generally. Such opportunities, however, are not likely to occur within the current traditional delivery model of the private dental practice and the employer/employee arrangements between dentists and hygienists. Instead, as multi-disciplinary, community based health clinics become
established through government initiatives to provide holistic and cost-effective health care, dental hygienists will increasingly assume the role of a multi-disciplinary team member within a community clinic. No mention was made of whether or not dentists would also be part of this new team environment, or whether participants believe that the government will raise the present level of public funding for oral health care services delivered via community clinics. As participants spoke of dental hygiene’s transition, they often blended their views of changing roles and work settings, resulting in descriptions of current and future work in long-term care facilities, seniors’ homes and institutions. They also identified their role as a ‘primary health care provider’ in community care. In addition, reference was made reference to an increasing emphasis on non-traditional dental hygiene roles such as researcher, change agent/advocate, and consultant.

Content analysis of documents such as Dental Hygiene: Definition and Scope - Draft (CDHA, 1994c) revealed further support for the idea of changing dental hygiene roles. This document referred to dental hygiene practice standards developed in 1993 which applied to multiple dental hygiene roles, and had since surpassed standards published in 1988 which related specifically to the clinical role of the dental hygienist. Analysis of this and other documents (CDHA, 1992c; CDHA, 1995a) further supported the notion of expanding dental hygiene roles (clinical therapy, health promotion, education, administration, research) and multiple work settings (private practice/community health, outreach/home care, institutions, primary health care centres, research, industry, consulting firms, professional organizations). According to both the CDHA and study participants, dental hygienists’ desired involvement in the growing multidisciplinary approach to health care is occurring simultaneously with various health care reform initiatives being witnessed across North America.
**Status of Women**

Another important factor which has altered the status of the dental hygiene occupation, as reported by participants, is the increased status of women in society. Dental hygienists across sample sub-groups perceived positive changes in the status of women, and felt that these changes had contributed to a more favorable view of women in dental hygiene, and to increased public recognition of the services they provide. Societal changes with respect to women’s status have also equipped dental hygienists with a greater level of confidence in their professional roles. Participants claimed that many hygienists are now attempting to alter traditional dominant-subordinate relationships between male dentists and female hygienists. This was illustrated in the words of participants such as:

... confidence is growing but I think that also has to do with this - the “woman of today” is more confident and wants more for herself as a majority... we feel stronger as a group, that we’re not perhaps as you know, subservient than we may have once been, that we were more accepting of the environment. (Participant 27, Manager/Leader)

... back in the days when women were pretty much controlled by, you know. We all believed that, that’s the way it was. That’s the way it was going to be and so we accepted it quite readily and I think today’s individuals, individual women aren’t as readily controlled as they used to be. (Participant 48, Community Health Practitioner)

Participants’ increased sense of being valued and respected can also be viewed as part of dental hygienists’ unwillingness to continue to be controlled and dominated by male employers. The sense was given that hygienists are prepared to challenge their subordination to dentists.

**Leadership**

It appeared that ‘leadership’ in dental hygiene was in transition. In the past, the educational community dominated decision making. More recently, members of professional dental hygiene organizations have assumed a more active leadership role. Community health practitioners and leaders credited organized dental hygiene at the national level with creating and publishing documents which chronicled dental hygiene’s maturation
as an occupation, its achievements, its commitment to professionalism, its struggles, and its aspirations. As well, a growing sense of organizational structure and strength, and increased energy and resources were identified by participants. A leader in the Atlantic Canada region spoke of unifying the national organization through change, that is, improved communication with members, the initiation of a strategic planning process and common vision, and by restructuring. The changing role of the Canadian Dental Hygienists Association in the occupation’s growth was demonstrated in the organization’s future statement of goals and priorities for the period 1996-2000 which stated:

To facilitate increased access and choice for consumers and providers in the delivery of dental hygiene care.
To promote and advance quality dental hygiene practice.
To advance dental hygiene education.
To be an advocate and national resource for the dental hygiene profession.
To promote health and the role of oral health through initiatives that address individual and population health issues.
To develop productive working relationships with members of government, health providers, business and the public.
To promote quality dental hygiene research. (CDHA, 1995a, p. 3)

It is clear from these goals and priorities that the CDHA intends to promote not only improved access and care but to improve the level of education of dental hygienists, to raise awareness of dental hygiene as a profession, to put oral health on the health care agenda, and to become a key participant in all levels of health care.

These goals and priorities were elaborated by the President of CDHA in 1995 who said:

New priorities are emerging.... Dental hygienists, from coast to coast, are voicing their recognition of a changing environment....
Changing employment arrangements, amended employer dental plans, an unpredictable economy and other similar trends are contributing to a sense of uncertainty. Fortunately, progress comes from forces such as these: as people recognize the need to look beyond the status quo they often expand their horizons.

All across Canada we can see evidence of these forces starting to work. In British Columbia dental hygienists are starting to pursue employment in continuing care facilities. These opportunities will become more feasible thanks to changes in legislation and the establishment of the College of Dental Hygienists of B.C. In Ontario, the government is mandating long term care facilities to care for the oral health needs of their residents. At the same time, more and more dental hygienists are entering into contractual arrangements with their employers. If we use our ingenuity, the combination of these two trends may create new ways to meet consumer and provider needs.

Forces at work in Alberta may soon act as a catalyst to improve oral health by making it possible for the people of Alberta to have direct access to dental hygienists. The Atlantic and Prairie provinces are not without forces pressuring for innovation in health care delivery.

The entire country is ripe for changes that improve access to reasonably priced primary health care services. (Borowko, 1995a, p. 83)

Borowko’s comments suggest new ways in which dental hygienists can provide preventive services to the public in settings not normally associated with dental hygiene care, such as long term care facilities. Her commentary also refers to potential opportunities for direct public access to dental hygiene care as a result of changes in provincial legislation governing hygienists. She suggests that dental hygiene services may be less costly if they
are delivered to the public directly by dental hygienists, without the direction and involvement of dentists.

In short, participants described a shift in the leadership in dental hygiene from educators to representatives of organized dental hygiene, for example, those individuals who hold official positions in professional dental hygiene associations. One explanation for this shift may be due to increasing membership rates which have strengthened the human and financial resources of dental hygiene organizations ("Annual Report," 1999). In turn, these changes have allowed the "voice" and interests of dental hygienists to be expressed through professional associations such as the CDHA. Although participants stressed the continuing leadership role of educators, they emphasized the increasing importance of organizational leadership. A final, but less significant, transitional factor affecting occupational development is a greater public awareness of dental hygiene.

Public Awareness

Generally, participants held the perception of an improved public image of dental hygiene.

*I think the public perceives dental hygiene better and better as time goes by as more and more people have the opportunity to actually interface with a dental hygienist over time. They you know, there [is] certainly a lot of you know... talk on the street. If you ask people about a dental hygienist, they always say, "Oh well that's the person who spends a lot of time with me but gets very little of the credit" kind of thing. (Participant 48, Community Health Practitioner)*

Many participants believe that dental hygienists and their roles will become better known to government, to the public, and to other health professionals with the establishment of independent dental hygiene practices, and as more provincial dental hygiene bodies become self-regulating.

*A lot of the public had no idea of the difference between a dental assistant and a dental hygienist and over the last few years with us going for independent practice and the work that has been done, I think that people are more aware now. But there are still a lot of people out there that really don't know the difference between us and that will come with time. (Participant 30, Private Practice Practitioner)*
A diploma dental hygiene student described how public perception of dental hygiene will alter once dental hygienists begin to practice independently of dentists.

A lot of people think doctors are professional but they don’t think nurses are professional cause they are always under them. I think it’s the same as us. Like we’re, it looks like we’re always under the dentist in the public view so if we do separate and be able to practice on our own, then people would think we’re, you know more of a professional. (Participant 35, Diploma Student)

Another dental hygienist perceived that the public’s impression of dental hygiene will improve as clinical practitioners develop an individualized approach to providing care to clients and refrain from ‘lecturing’ everyone. Their role in ‘prevention’ would become clearer.

I think the public is beginning to view dental hygiene in a very positive way. I think they see the results of dental hygiene services in terms of improved oral health. I think they are beginning to make the connection between what the dental hygienist does and improved oral health as opposed to “that girl in the dentist’s office who cleaned my teeth”. I think dental hygienists need to work on that role. (Participant 15, Manager/Leader)

The public image of the dental hygienist will be enhanced further when practitioners are seen as integral members of future multi-disciplinary health teams. Other participants believed that as society became more positive in their views of women, this would contribute to improved images of dental hygienists. These changes in the occupational development of dental hygiene have also been accompanied by changes in knowledge and skills.

Knowledge and Skills

Generally, participants in this study indicated that in the past, curricula in dental hygiene diploma programs focused primarily on the development of clinical skills to prepare dental hygienists to work in private practices, and to a lesser degree in public health settings. Clinical dental hygiene care was quite routinized without a great deal of research to support the efficacy of particular dental hygiene treatment procedures. Graduates of the last decade identified a new approach to clinical care, a shift from a technical base of
practice to a knowledge based practice, and a transition from isolated practice to a multi-disciplinary delivery model. They spoke of the development of new skills and knowledge consistent with expanded dental hygiene roles in new settings.

If we start to expand and move into areas that we don’t currently practice in any great numbers, then I think our education will start to have to support those practice settings and take on different characteristics.... Whereas dental hygienists are looking at new territory and new ways to serve client groups, then their education will change.... (Participant 42, Community Health Practitioner)

Participants further stated that the nature of dental hygiene practice is in transition, moving from the provision of narrowly focused services to a more comprehensive, holistic approach to care. This was a result of increased emphasis on behavioral science teaching in dental hygiene programs. Dental hygienists in this study see the need for increasing the length of diploma level dental hygiene programs to accommodate the teaching of skills relative to the emerging ‘process of care’ approach, new technologies and professional growth. Particular mention was made of the growing need to prepare dental hygienists as independent practitioners. Some participants claimed that the establishment of dental hygiene degree programs would address the need for lengthier educational preparation.

...but the scope of dental hygiene practice is so much broader now and the technology has expanded and in many areas that...No, I’m not satisfied that we’re doing enough within the current restraints. I think we need more time. The scope of practice has enlarged. The professional requirements, autonomy, self responsibility, you know, there has been a dramatic shift. It’s not enough to go out there and do something and just walk away. You’re now being held accountable for what you’re doing and you’re being expected to do even more and this whole area of health promotion and wellness requires a different set of skills than we have really developed a whole lot in the past. And when I say “past”, I go well back in the past. (Participant 14, Diploma Educator)

All participants referred to a growing interest over the past decade in conducting dental hygiene research and developing theory which would provide support for current and future practice. Minimal research has been carried out in the past by dental hygienists for this purpose. Instead, theoretical knowledge has been borrowed from other disciplines, particularly from dental research. As dental hygiene evolves and matures as an occupation, so has the research base. Many dental hygienists noted that more members of the
occupation were furthering their education beyond the Diploma in Dental Hygiene. For some hygienists, this meant that they had now acquired the necessary skills to carry out research.

...I do believe that practice has to be centered in science and to this point it’s only been in the last 10 years or so where dental hygiene research has taken an area of importance within the profession. So I do believe that it – you do need science to base your profession… you know during the maturing years that some of you know that science can be used to validate and initiate the procedures and paradigms and all sorts of things that we use. I do think now we need to very concretely establish our own and I think we are…. I think it’s just the way professions begin. They begin by borrowing a lot and then they create their own. (Participant 29, Diploma Educator)

The perceptions of the study participants were reinforced through information contained in documents published by the Canadian Dental Hygienists Association. For instance, the CDHA Mission/Vision Statement (1995a) refers to the fact that “dental hygiene practice is based on an increasing body of knowledge based on research in dental hygiene, biological sciences and social sciences and technology” (p. 3). Similarly, an editorial written in the CDHA journal Probe (Pimlott & Zier, 1990) refers to a transition from experientially based dental hygiene practice to the application of treatment procedures which are grounded in science.

In addition to a transition in skills, knowledge, research and educational preparedness generally, participants cited simultaneous changes in the interests and characteristics of dental hygiene recruits. Some believe that dental hygiene degree programs will attract “better prepared” students. Most dental hygienists stated that recruits and recent graduates were more concerned with the professional status of dental hygiene than they had been in the past.

Dental hygienists a lot of the times I think, especially ones that may have graduated a number of years ago, don’t see themselves as professionals…. They don’t have a true sense of what a profession is and so I don’t know if they’re just …. To them it’s you know, go in…. Like I said… go in and do the job and that but they – I don’t think they have a sense of what’s, what dental hygiene could be or have never had the desire…. Like again once they finish school, just go out and do the work. (Participant 32, Manager/Leader)
However, one participant, a private practitioner from Ontario, held a very different view of recruits. She viewed recent graduates in dental hygiene as greedy, unreliable, and less professional in their behaviors than former graduates. However, this negative appraisal is counteracted by a dental hygiene leader from Alberta who believed that greater numbers of dental hygienists were entering dental hygiene as ‘assertive’ and ‘independent’ individuals, and that they were ‘career’ oriented versus ‘job’ oriented. Some participants associated this growing independence with the fact that women’s status in society is changing.

*I think that, you know, confidence is growing but I think that also has to do with this - the “woman of today” is, is more confident and wants more for herself as a majority.* (Participant 27, Manager/Leader)

Many dental hygienists perceived that as the status of the dental hygiene occupation improved, the caliber of the recruits would also increase. These changes could also lead to different and less deferential relationships with other health care professionals.

**Relationships with Other Health Occupations**

Generally, the relationships between dental hygiene and dentistry, at the individual level and at the organizational level have shifted. The nature of these relationships continues to be in transition. Study participants offered a number of explanations for this changing pattern. Historically, a pattern has been established in which dental hygienists were subordinate to dentists. Dental hygienists described this relationship in terms of the ‘subservient and auxiliary’ role of hygienists.

A community health practitioner from Alberta noted that although the power held by provincial dental organizations and the academic dental community in the province hadn’t altered over time, dental hygiene self-regulation in this region had resulted in increased resources, money, and political clout for organized dental hygiene. The dramatic ‘power’ imbalance between these organizations is seen to have changed. Dental hygienists generally, spoke about increased tensions between national and provincial dental and dental hygiene associations which were stimulated by two fears of dentistry: the fear that
independent dental hygiene practitioners would threaten the economic security associated with the practice of dentistry, and the fear that as dental hygiene self-regulation grew, dental hygienists would be better equipped to resist intimidating practices by dentists. A dental hygiene leader from British Columbia cited the example of attempts by the College of Dental Surgeons of British Columbia to exert power over the British Columbia Dental Hygienists Association. Participants perceived that organized dentistry has less control over dental hygiene associations than in the past, and they are no longer the ‘keepers of dental hygiene’ in many jurisdictions. Past and current relationships are acrimonious because dental hygienists have expressed the desire for greater ‘freedom’ in the workplace and because organized dental hygiene has sought greater control over the development of the occupation. Future relationships are expected to be more interdependent at the practitioner level, and less dependent than in the past. Participants did not comment further on the changing nature of relationships between organized dental hygiene and organized dentistry.

Although many of the participants in this study personally described positive experiences in their working relationships with individual dentists, they reported that the experiences of many of their colleagues were negative. However, at the individual level, dental hygienists now felt more empowered to challenge the control of dentists over the practice of dental hygiene, and their domination over dental hygienists themselves. This feeling of empowerment was, in some instances, perceived to be related to the increased education of dental hygienists and greater levels of self-confidence, which were the result of the improved status ascribed to ‘women’ in society.

...it’s been so long since I’ve been in private practice but they... dentists certainly did control dental hygienists in the work setting... in the day that I was a clinical hygienist. There’s no, no doubt about it but I think that was you know, it was so long ago. It was back in the days when women were pretty much controlled by, you know. We all believed that- that’s the way it was. That’s the way it was going to be and so we accepted it quite readily and I think today’s individual, individual women aren’t as readily controlled as they used to be. (Participant 48, Community Health Practitioner)
In other cases, perceptions were associated with the establishment of independent dental hygiene practices, and the related change from direct control by dentist employers over dental hygienist employees. Study participants expressed the view that changed relationships were a direct outcome of dental hygienists’ refusal to continue to be dominated by dentists, and not because dentists had altered their controlling behaviors.

...the hygienist is subservient to the dentist. Oh yeah. Not that I would like this or, or want this. It’s just that I think that’s the role that... It’s a historical role of the dentist being the boss. The dental hygienist being auxiliary which is not a very positive term and if you.... It’s changing. I think as, with independent practice, it will change because then the dental hygienist could be the boss.... It’s not going to be a drastic change quickly that’s for sure. (Participant 34, Community Health Practitioner)

A few participants in the study, representing different regions of the country and dental hygiene work settings, reported that they were aware of some dental hygienists, or had observed hygienists, who preferred to be dependent on dentists, and did not object to their subordination to them in the workplace.

...but I’ve seen very much more the power relationship where the dentist has given specific direction and this is how it shall be done and there [are] no other differences in it and the hygienist following along - usually quite resentful. So what I’ve seen is.... Well actually I’ve seen two things. Either really resentful and not terribly happy with it or completely accepting to the point where at times maybe clients are under-serviced because there’s acceptance of whatever office policy is mandated by the supervising dentist. I’ve seen that. I can’t say that I function that way but I have seen that.

(Participant 24, Manager/Leader)

Participants also thought that individual relationships between dental hygienists and other health professionals, for example nurses and dietitians, were in transition. They anticipated that with the growth of multi-disciplinary health clinics in every province, dental hygienists would establish collaborative working relationships with other members of health care teams in these sites. They expected that as dental hygiene evolved as an occupation it would work at increasing its interrelationships with similar health occupations such as nursing. This was supported by document analysis of an article written by the President of the CDHA in 1992 where reference is made to the fact that “government agencies and allied health professionals are turning to hygienists for input into health care
issues" (Mitchell, 1992b, p. 3). This statement suggests that other health occupations are seeking the experience and expertise of dental hygienists to provide them with advice on oral health matters. These changes in relationships with other health professionals are also reflected in the actual practice of dental hygiene.

**Dental Hygiene Practice**

Dental hygienists and dental hygiene students claimed that the nature of dental hygiene practice was undergoing a transformation. In the past, practice was viewed primarily as two things: providing the clinical procedure of 'scaling teeth' and educating the public about preventive oral care. Participants stated that the shift in dental hygiene practice had moved from a narrowly defined range of technical treatment/prevention services to a more 'holistic', comprehensive approach to care. As one participant responded to an inquiry about the evolution of dental hygiene over the past two decades:

*If it's evolved, it's in, it's in the process of care. It's moving from the technical approach of being a cleaning woman to seeing themselves in planning and providing a broader scope of care. More integrated and comprehensive program of care.* (Participant 14, Diploma Educator)

Included in the dental hygienist's expanded scope of practice was a greater level of oral assessment skills (diagnosis), more health promotion, individualized client ‘care plans’ and increased responsibility for recommending client referrals to other health practitioners (in both supervised and unsupervised dental hygiene practice). Several participants spoke of the integration of ‘Human Needs Theory’ (Darby & Walsh, 1995) into current and future dental hygiene practice. They also stated that the further development of the occupation of dental hygiene means that the dental hygiene community must come to terms with what dental hygiene practice is, perhaps even redefining practice.

Publications such as those that define dental hygiene or describe education standards, also identified this evolution of dental hygiene practice from a simple treatment oriented approach to a process of care involving four phases: assessment, planning,
implementation, and evaluation (Health & Welfare Canada, 1988; CDHA, 1994c; and CDHA, 1994d). This model "reflects a systems approach and conceptualizes dental hygiene practice as a problem solving process rather than the performance of specific tasks" (CDHA, 1994c, p. 4). In this transformed model of practice, the dental hygienist makes decisions based on the collection and critical analysis of data (assessment), plans treatment by developing goals and objectives for care and selecting dental hygiene interventions (planning), implements the care plan (implementation), and evaluates the effectiveness of the treatment (evaluation).

**Summary**

This chapter has presented a description of the study participants and discussion of the core theme Dental Hygiene in Transition and its related components: occupational development, knowledge and skills, relationships with other health occupations, and dental hygiene practice. Overwhelmingly, dental hygienists and dental hygiene students referred to dental hygiene as an occupation undergoing transformation. This theme penetrated participant interviews and was reinforced by document analysis. Changes were identified in relation to individual hygienists and the occupation itself. For example, in several provinces the regulation of dental hygiene has shifted from the authority of dental boards to self governance by dental hygienists. As well, a small number of independent dental hygiene practices have been established, the roles and work settings of hygienists are expanding, and relationships between dental hygienists and dentists are changing as hygienists become less tolerant of dentists' domination. At the occupational level, leadership has shifted from the educational community to professional associations, public awareness of dental hygiene is increasing, and dental hygiene practice is evolving from a simple technical orientation to a more complex evidence (research) based approach to care.
Chapter Five continues the analysis of the evolution of dental hygiene by examining the major themes identified in the data in more detail.
CHAPTER FIVE

FINDINGS: MAJOR THEMES

This chapter presents the findings regarding major themes that relate to the core theme previously discussed in Chapter Four. During the process of data analysis, numerous categories and sub-categories of data were identified and given appropriate labels. Categories were then grouped with those representing a similar topic. Together this group of categories was assigned a thematic label that best described the whole of the common parts. Specifically, the themes identified are Development and Profile of Dental Hygiene, Relationships between Dental Hygiene and Dentistry, Dimensions of the Professional Project of Dental Hygiene, and Dental Hygiene Education. The various categories and sub-categories are also identified and discussed. Together, these themes and their components depict the past, present, and future development and status of the dental hygiene occupation and its members from the standpoint of the study participants. As discussed in the last chapter, each major theme and its categories are presented separately. However, the interrelatedness of the individual themes to each other and to the core theme, as illustrated in Figure 4.0, will also be discussed in this chapter. Dental hygiene is apparently an occupation undergoing change, with change in one direction affecting the others. For example, dental hygiene’s professionalization initiatives have influenced dental hygiene education, which in turn has affected the relationships between dental hygiene and dentistry.

Major Theme: Development and Profile of Dental Hygiene

Within the major theme of Development and Profile of Dental Hygiene, two categories were identified. These two categories, Individual and Occupational Aspects, in
turn have in total thirteen sub-categories. Within the Individual Aspects sub-categories of: Reasons for Entry, Learning Dental Hygiene, Development of Self-Concept and Image, Perceptions of Dental Hygiene Role and Professional Role(s), Qualities and Skills of Dental Hygienists, and Distinct Role From Dentists are presented. For the Occupational Aspects category, sub-categories discussed are: History and Development, Image, Culture of Dental Hygiene, Organized Dental Hygiene, Dental Hygiene Issues, Regulation of Dental Hygiene, and Practice of Dental Hygiene.

In general participants described their understandings, perceptions, and experiences relative to the status of dental hygienists and the occupation. Within the Individual Aspects category they recalled their 'student days' and the ways in which they came to understand the role of the dental hygienist and the practice of dental hygiene. Dental hygienists expressed their views of the working relationships between hygienists and dentists. They characterized dental hygienists on the basis of their own observations and experiences, as well as the perceptions of others. At the occupational level, they described their views of professional organizations and their role in dental hygiene's development. They spoke about dental hygiene's successes and failures. Participants conveyed their understanding of the aspirations of individual members. Generally, participants were very candid in sharing their beliefs and experiences with the researcher. These data provided a comprehensive overview of the establishment of dental hygiene as an occupation, and its growth over time.

**Individual Aspects**

Within this category, six sub-categories emerged that addressed the professional development of individual dental hygienists over time, beginning with Reasons for Entry into dental hygiene.
Reasons for Entry

Based on the perceptions of participants, individuals select dental hygiene as a career for a variety of reasons. These include: altruism (described as the desire to help people); good employment opportunities and a demand for dental hygienists; flexibility in work arrangements, which is appealing to women with multiple roles; and reasonable remuneration. Participants were not questioned specifically about motivational factors related to hygienists’ decision to enter dental hygiene. However, those dental hygienists who volunteered this information most often cited salary as the primary factor in their colleagues’ and peers’ decision making.

_We don’t go into it with the idea of becoming a professional. I think a lot of people choose the profession simply because of the dollar signs attached to the salary that goes with it and we don’t always move away from that. And so that’s always overshadowing, you know, aspects of our decision-making and our culture and our identity._ (Participant 24, Manager/Leader)

This manager/leader suggested that the image and culture of dental hygiene may be influenced, perhaps negatively, by the fact that some hygienists enter dental hygiene ‘primarily’ because of the income level it offers. Several participants also revealed that there were hygienists who chose to enter the occupation because they viewed it as a ‘job’ versus a ‘career’. A job was seen as challenging work that did not require a commitment beyond normal daily work hours, whereas a career was perceived to be more encompassing of one’s life and requires a greater personal commitment.

A number of researchers in the health professions have demonstrated that prior socialization may contribute to an individual’s career selection (Shuval, 1980; Wayman, 1986; Wassel, Mauriello, & Weintraub, 1992). Socialization may be influenced by several factors: occupational inheritance, that is, having a family member/friend in the field, having prior work experience in a related field, or some other prior exposure to the field. In this study, no participants had family members in the field, but a very few had friends who were dental hygienists, and they claimed these women influenced their career choice. Several of the participants who had previous work experience as dental assistants, and who
resided in Ontario, did not associate their career choice of dental hygiene with the fact that they had a background in a related health occupation. This may be due to the fact that one of the admission requirements for entry into many dental hygiene programs in Ontario is certification as a dental assistant. Therefore, these participants did not choose to become dental assistants, but were required to do so for admission purposes.

**Learning Dental Hygiene**

Dental hygienists and students were consistent in their explanations of the ways in which they learned the practice of dental hygiene. Their dental hygiene education was the foundation for their skill and knowledge acquisition. Within the educational environment, teacher instruction was seen to be the primary factor related to learning, particularly instruction provided by clinical teachers. These individuals modelled behaviors and skills which students assimilated into their understanding of dental hygiene practice. Dental hygiene curriculum/course content was also very critical to learning dental hygiene, but it was instructors who made learning dental hygiene ‘real’ for students.

One of the most widely studied issues in professionalization is the role of socializing agents such as faculty members in the formal process of socialization. During professional socialization individuals acquire knowledge, skills and an identity, and learn values and norms which are consistent with a specific occupational role (Olesen & Whittaker, 1970). Presumably, formal reference groups such as academic faculty and clinical staff serve as socializers who represent certain models of standards and behaviors for their students (Merton, Reader, & Kendall, 1957; Shuval, 1980; Saylor, 1988; Wilson & Startup, 1991). Kraemer (1990) found that the effects of faculty models were minimal with respect to the development of dental hygiene students’ professional values and attitudes. Conversely, Wayman (1986) demonstrated that instructors in dental hygiene can be effective socializing agents for students. Although the research findings in this area are inconsistent, participants in this study identified their dental hygiene instructors as being
pivotal to their understanding and development of their professional role. Positive relationships between students and teachers facilitated students’ learning as illustrated by the following quotation:

Researcher: Did they teach you anything or did you learn from them anything about.....

Participant: Yes, definitely.... Particularly two of them - what they shared was a tremendous sense of caring to.... What I got from them was caring between them as an instructor and me as a student. But also that when I observed them practise and working with my patients as a student, they also, you know, shared that great compassion for, you know, the needs of those individuals and they did it in such a calm ease that and... they had such a joyful, positive approach to the delivery of sort of traditional care that.... I was just I think really touched by that approach and I don't ever think that I've mastered it but, uh, I still very much admire those skills that they had. (Participant 29, Diploma Educator)

Participants also acknowledged that learning dental hygiene was an ongoing process and that learning continued beyond graduation in two ways: through one’s experiences in the workplace (workplace socialization) and by participating in continuing education, usually by attending seminars/courses.

Several dental hygienists stated that they had previous exposure to dental hygiene practice (prior socialization) through their work experience in either the field of dental assisting or dental therapy. They claimed that this prior exposure, in addition to their dental hygiene education, contributed to their understanding of the work of dental hygienists. This finding is supported by a study of three nursing training programs in South Wales (Wilson & Startup, 1991). Investigators confirmed the positive influence of previous work experience on the formal socialization of student nurses. Fifty percent of teaching staff felt that prior nursing experience, defined as hospital volunteer work or nurses aid work, assisted in the development of valued nursing attributes during formal education.

A community health practitioner noted that for some individuals learning dental hygiene was a maturation process. This process meant being educated at different levels.

Well I would say at the diploma level I probably wasn't mature enough to really kind of get the benefit of whatever education I received at that time. I think I more took in the scientific and you know the technology and the clinical stuff and the academic information but I never put it into a real sort
of professional capsule at that time. I mean I think when I got out I was just so concerned doing the job, the technical aspect of the job that, I mean I didn’t have time to really think about what was my position going to be in the world.... I think it wasn’t until after I had taken the Bachelor’s degree and actually sort of sat down for 2 years and rubbed shoulders with people who you know were willing to make a real commitment to something....You know you kind of learn through osmosis. (Participant 48, Community Health Practitioner)

In this practitioner’s experience, the technical skills and knowledge required for entry into practice were learned at the diploma level. The baccalaureate dental hygiene program setting provided an environment for her to learn from her peers: to expand her knowledge of basic practice, and to achieve a greater understanding of dental hygiene as a profession. Similarly, Kraemer (1986) found that baccalaureate degree graduates of dental hygiene held a stronger professional attitude concerning the belief in “professional autonomy”, in comparison to associate degree graduates. These findings may have implications for the professionalization of dental hygiene with respect to differences between diploma (or associate degree) and bachelor dental hygiene programs, and students’ development of a professional identity. The findings suggest that ‘learning dental hygiene’ and ‘learning the professional role’ may be enhanced at the baccalaureate degree level, perhaps because of program length and a lengthy formal socialization process. It may also be that a certain level of maturity is achieved during this process.

Development of Self-Concept and Image

Study participants easily recalled when and how they developed a self-concept of the role and characteristics of the dental hygienist, as well as an image of a hygienist. They spoke of positive, as well as negative self-concepts which developed over time, and were influenced by several factors. A significant factor that was common to the creation of a self-concept was the dental hygienist’s interactions with others, for example, with teachers and co-workers. Two editorials written in the Canadian Dental Hygienists Association journal reinforced this claim by participants.
Throughout our lives, we initially learn our roles from the outside in, as a means of fulfilling specific social roles in a manner that is consistent with the established cultural traditions. We learned the traditional dental hygiene role in this same manner. We all have anecdotal evidence of the expected norm of behaviour and skill proficiency learned at the knees of our beloved instructors in dental hygiene school. Our educational institutions have taught us the rudimentary skills which enable us to act as clinicians, educators, health promoters, administrators, and researchers. (Landry, 1994a, p. 3)

...the desire to continuously provide quality oral health care must be internalized by each individual dental hygienist. To aid this process, this concept must be incorporated into dental hygiene curriculums [sic] and transmitted to students by their educators. Life-long learning is a “need to know” not just a “nice to know”. We expert hygienists also have a responsibility to act as role models for the novice hygienists. (Landry, 1994b, p. 203)

Participants reiterated that role modeling by dental hygiene instructors was the single most important determinant in the development of a professional self-concept and in learning dental hygiene generally. All but one participant, a diploma dental hygiene student from Ontario, described the way in which their teachers had helped shape their understanding of clinical practice and the professional role of the dental hygienist: particularly as it related to the hygienist’s interactions with his/her clients. Teachers modeled caring, empathy, and patience. They also exhibited effective interpersonal skills in their work with clients. A diploma educator from British Columbia stated that an important role for an educator was to impart professional values to students. She recounted
the impact of teacher role modeling during her own experience as a student many years ago.

...and primarily it was the role modeling of the people that taught us. I've always remembered.... She always served as a person who helped me understand and appreciate what it meant to be a professional person and what my responsibilities and obligations were to society for the privilege of being a professional person. So more than say any course content that set me up, I would say it was more the, the role modeling, the development of attitudes, the - I guess I was going to say more the socializing kind of things into the profession I directly attribute to, to her in particular. (Participant 37, Degree Educator)

A manager/leader from Alberta stated that the development of her self-concept was associated with the interactions she had with a teacher role model, whom she described as confident, a good communicator, skilled, and respectful of student's learning. Another manager/leader in British Columbia spoke about the characteristics of a positive role model she had during her student experience, which included enthusiasm and high professional standards.

Repeatedly, participants stressed the importance of educator role models in the development of a dental hygiene student's self-concept. Although generally, the experiences of participants during their dental hygiene education led to the formation of a positive self-concept, there were a few exceptions. Several dental hygienists were critical of instructor role models who, in their view, placed too much emphasis on the clinical role of dental hygienists and their 'dependence' on dentists to facilitate this role. This resulted in a negative self-concept because dental hygiene students learned to be 'subordinate' to their dentist employer upon graduation, rather than being confident about their acquired knowledge and skills.

...it seems to me that we create dental hygienists that when they're out in practice, they become very, very comfortable within the dental office environment where they are essentially "taken care of" and work for somebody else and I guess I feel that one of the limitations of practicing hygienists is that they seem to me to be generally, have a very narrow vision and so I think that educational institutions have a great responsibility in helping to create a young professional. Expose a young professional to issues to try to broaden their view so they go out with perhaps more confidence to take on more non-traditional arrangements in practice or whatever.... I think it is the responsibility of educational institutions to
really create a dynamic model and I think if you look at most educational institutions they still put huge emphasis on their clinical practice programs far beyond what is actually needed to create a competent professional.... If we figured out what amount of time you need to make a person clinically competent and then at that point, put them into other more meaningful independent collaborations, perhaps with other groups, or in other settings, that we would expose them much more broadly than we do. (Participant 29, Diploma Educator)

This educator argued that it was the responsibility of dental hygiene programs to ensure that graduates developed a sense of ‘competence’ and ‘confidence’ with respect to their clinical role, so that they were not reliant on dentists to oversee their work. Another participant provided a similar example of how dental hygiene educators sometimes curtail the development of independent decision making skills in their students, thereby creating dependent relationships between dental hygienists and dentists.

As educators I would really like to see, you know again, just instilling in the students as much pride in their profession, as much confidence in their abilities to practise as we can give them. I think often the systems we use for grading students undermine some of their confidence in their own abilities and maybe towards the end of their programs it needs to be loosened up and just let them experience some decision making without full supervision so that when they step out these doors, they aren’t as dependent as they might be. Some never are dependent but some still maintain almost a dependency relationship that’s transferred from the instructor/student relationship now to the dental hygienist/dentist employer relationship and we don’t have a comfort level in, in letting go of that. (Participant 32, Manager/Leader)

This manager/leader stated that graduates should be less dependent on others as they enter practice.

Many participants drew a distinction between the development of a student’s self-concept during their education, and the experiences of the graduate hygienist relative to changes in self-concept. Generally, the experiences of students were positive. However, participants described the experiences of many practitioners working in private dental offices as being negative. For some dental hygienists who had positive working relationships with their dentist employers, their professional self-concept was not affected negatively by their relationships. But for many practitioners, elements of their work environment damaged their positive self-concept and caused their self-esteem to be
lowered. The most relevant factor in these instances was the inequitable relationship that existed between the dentist and the hygienist.

*I think that a lot of dental hygienists have been tired out, have been worn down by some of the practice settings in which they work... and then I think that after a while, if they've worked in a situation that has not helped them grow personally and professionally, I think that very many dental hygienists end up in a rut and it makes it a lot more difficult for them to be positive about the future because I have met many dental hygienists who have worked in practice situations where they have not been valued very much. They have been sort of disregarded, discounted... dental hygienists have been put into situations where they have not been treated with respect or equality to the point that they no longer can see themselves as being a professional, as being qualified, as being worthy of sharing an opinion... I've, I've seen it very many times and I find it very upsetting. So I think it's got a lot to do with people's self esteem; that's going to translate positively or negatively into their professional esteem.* (Participant 42, Community Health Practitioner)

As quoted above, this participant described the negative effects of some dental hygienist and dentist relationships. In which the hygienist is not valued or treated with respect. This example implies that in some cases, a hygienist's positive self-concept may be altered over time as a result of a poor working relationship with a dentist.

The development of a professional self-concept for participants in this study was closely associated with their image of a dental hygienist. When dental hygienists were asked what their image was, they most often described a dental hygienist as a health professional who was educated, community oriented, female, and had a crisp, neat professional appearance. One participant suggested that hygienists had a 'certain look' and because of this they were easily identified.

*I think in terms of aesthetics most dental hygienists are pretty smart looking. I think you can often pick out who dental hygienists are because they usually take pretty good care of themselves. They like to dress reasonably smart.* (Participant 40, Private Practice Practitioner)

Based on the perceptions of the participants, a dental hygienist's self-concept is developed over time, beginning in the educational program. Role models, primarily dental hygiene instructors, are the most critical factor in the formation of this self-concept. Participants also indicated that the dental hygienist's professional self-concept often
changes with entry into the workplace, and the influence of relationships between the dental hygienist and others, specifically dentists.

Perceptions of Dental Hygiene Role and Professional Roles

Participants did not have a consistent view of the role of the dental hygienist or a uniform concept of the dental hygienist’s professional roles. Frequently, the discussion of these roles overlapped. However, what emerged from the data was that the professional role of the hygienist extended beyond the clinical practitioner role. Document analysis revealed a much clearer, more focused description of these roles.

Generally, the dominant role of the dental hygienist was seen to be clinical in nature. The hygienist was viewed as ‘knowledgeable’ by participants in all sample groups. As a component of the clinical role, participants described the hygienist as an educator; educating his/her clients in preventive oral health. While managers/leaders and diploma educators identified a ‘collaborative’ relationship between the hygienist and other health professionals (not always dentists), private practice practitioners acknowledged that the dental hygienist had an interdependent and often a dependent relationship with the dentist. All participants except private practice practitioners stated that the dental hygienist had a role in community health and health promotion. This may be explained by the fact that these private practice practitioners are less likely to be cognizant of the role of the hygienist outside of the private dental office, because they themselves are strongly oriented to private practice dental hygiene. Diploma educators claimed that the hygienist has a commitment to life-long learning. Managers/leaders elaborated on the role of the dental hygienist in the areas of research and administration.

Some of the perceptions of participants with respect to the professional role of the dental hygienist were similar to or the same as their perceptions of the dental hygienist role. For example, all participants related the professional role to a knowledge base and expertise. Again, community health practitioners and diploma educators defined the
professional role as predominantly that of educator and clinician. In their view, a professional person is well educated and makes practice decisions based on her/his experience and education. Educators and managers/leaders distinguished the professional role from the non-professional role. They claimed that the professional role of the hygienist meant that the dental hygienist practitioner controlled dental hygiene services, and had responsibility for the care that they provided, in an unsupervised practice setting. This occurred in an independent dental hygiene practice or in a dental practice under general supervision (dentist not necessarily present while services are provided). These participants believed that professional persons view their work as a ‘career’ versus a ‘job’, implying a greater sense of commitment to the service role. In contrast, a few participants from Ontario and one from Nova Scotia claimed to know some dental hygienists who viewed their occupation as a job and not a career.

Manager/leader and educator participants stated that another aspect of the professional role of the hygienist was collaborating with other health professionals. Lifelong learning was viewed as a component of the hygienist’s professional role by manager/leaders and degree students. Manager/leaders provided the most extensive description of the professional role, referring to professional hygienists as research oriented, excellent communicators, client-centered, active in the community, concerned with practice standards, and involved actively in their professional association(s). A few private practice practitioners also spoke of professional involvement. In short, participants view the dental hygienist’s role as clinical and educative in nature. The professional role of the hygienist was perceived to be more expansive and to involve an element of independent practice, a career orientation, a commitment to ongoing learning, participation in research, community work, and active involvement in the profession.

Document analysis provided a well defined perspective of the dental hygienist’s role and its professional dimensions. The Canadian Dental Hygienists Association states that the dental hygiene clinician has a preventive, planning, and therapeutic role in providing
oral services to clients in a variety of practice settings. The dental hygienist's role is not limited to clinical treatment; hygienists have roles in health promotion, education, administration and research (CDHA, 1994c). In a CDHA document on education standards, the dental hygienist's role is referred to as collaborative and interdependent with other health care professionals with no specific mention of dentists (CDHA, 1994d). The dental hygienist is viewed as: responsible for the care that she/he provides, an effective communicator, a problem-solver, change agent, and client advocate. The professional role of the hygienist involves life-long learning (continuing education, reading literature), adherence to established practice standards and membership in professional organizations. The CDHA Code of Ethics (1992a) makes reference to the professional role of the dental hygienist being guided by knowledge: moral, caring, and ethical behaviors; and specific expertise. The professional roles of the hygienist include clinical practice, education, research, and management. This perspective was contrasted by the definition of the dental hygienist's role published in the Nova Scotia Dental Act (Nova Scotia Provincial Dental Board, 1992). This document identifies only two roles for a dental hygienist: clinician and educator. Based on these data, it is evident that the beliefs of Nova Scotia dentists, in relation to the role(s) of the dental hygienist, are different than those of some study participants and different from information published by the CDHA. These findings, which are limited by the scope of this study, suggest that a conflict exists between dentists' and dental hygienists' perceptions of the dental hygienist's roles.

Overall, the perceptions of hygienists and students regarding the roles of the dental hygienist suggest that the professional role encompasses a greater degree of responsibility for the care provided to clients and less dependence on dentists to direct this care. The hygienist in the professional role is concerned with having specialized knowledge, and is skilled in well defined roles beyond clinical practice. In the professional role, the dental hygienist collaborates with other health professionals, in addition to dentists.
Qualities and Skills of Dental Hygienists

As participants were questioned about their image of a dental hygienist and their own self-concept, they described personal qualities and skills that they ascribed to the dental hygiene professional. The single, most frequent observation reported by participants during the study was that dental hygienists are ‘caring’ individuals. Beyond any other quality, hygienists were described as altruistic, caring about their clients and dedicated to the work that they do.

*I guess someone who is very human. I see myself as being human even though we’re working in you know really confined spaces... someone who has that humanness to them, that caring. (Participant 41, Manager/Leader)*

Dental hygienists were also viewed as being perfectionists by nature and very detail oriented. Having stated that, one diploma educator questioned whether or not hygienists’ attention to detail caused them to be “micro thinkers” rather than “macro thinkers”.

*I think that they’re very much ahh... very meticulous usually and very detail oriented which I consider sometimes a real detriment to moving the profession along.... I think uh, that they get involved with some of the technical kinds of things that are, that dental hygienists do and forget about you know what we’re trying to do as far as oral health goes. Spending lots of time on you know how you might debride a tooth seems to me not nearly as important as having people understand the kind of things that they need to do in order to improve their oral health. But I see dental hygienists that get into those real specific, what I consider detail kind of things, to the detriment of really understanding the big picture. (Participant 26, Diploma Educator)*

In this educator’s view, some hygienists become so “bogged down” with trying to perfect their clinical skills, that they fail to pay attention to larger oral health issues.

A number of participants described hygienists as being highly ethical at a personal and professional level. The CDHA Code of Ethics (1992a) reinforced this claim through its definition of the ethical principles that dental hygienists are expected to embrace and demonstrate. The Code identifies the values and standards of the dental hygiene occupation and the basic moral commitments of hygienists. The responsibilities of hygienists to their clients and to the profession of dental hygiene are also described in the Code.
The participants noted that hygienists possess above average communication skills, especially in their interactions with clients. In the role of oral health educator, hygienists assess the oral health status of their clients, and attempt to modify their behaviors so that they can attain optimum health. To achieve this end, dental hygienists must communicate effectively. The importance of communication skills for hygienists was also emphasized in various documents. For example, a CDHA (1994d) publication of education standards for dental hygiene students refers to the importance of utilizing decision making and conflict management skills in practice, being able to communicate in a positive way with coworkers, and having the skill to consult with other professionals.

Distinct Role From Dentists

The dental hygienists in this study perceive that they have a distinct occupational role from dentists as illustrated by the following quotation:

... there isn't anybody else doing what we do, even dentists. They're working in the mouth all day but they're not doing what we do. It's not as repetitious as what we do, and yeah, there's just no one else doing, doing what we do. (Participant 43, Degree Student)

Hygienists are concerned with the ‘preventive’ aspects of oral health care and dentists are oriented towards a reparative treatment function. As such, participants described the educative role of the hygienist in work with clients. They claimed that while dentists did not spend a great deal of time interacting with patients, hygienists did.

A focus on health and health promotion I think is primary and I think this is important for dental hygiene to distinguish itself in this area because the focus of our sister profession in dentistry has always been the detection and treatment of disease and I think the focus in dental hygiene and key to its culture is in fact, our preoccupation with preventing disease, keeping people healthy or better still and more appropriately, assisting people in achieving and maintaining their own health. (Participant 27, Manager/Leader)

Dental hygienists were also seen to have a more holistic approach to client care than dentists. A diploma dental hygiene student, who had been exposed to dental students during her own training, stated that dental practice was preoccupied with treating dental
disease versus being concerned with preventive measures. This student claimed that dental students were not as well trained in preventive oral health as dental hygiene students.

I haven’t been out there long enough to really have a clear-cut view but what I see in the clinic is we do, we really look at the, at the gingival tissue. We look at the response of the tissue. We are looking for deposits. We’re... we’re always looking for the overall health of the entire mouth but whereas I see the dental students and I don’t know if it’s because of the way it’s criteria based and you have to get so many crowns and bridges but I know we get patients that were dental students’ patients who have never seen a hygiene appointment before and a lot of times their mouth is a mess. You know, there are still deposits there and... I’m just.... Because they have.... They are busy with their crowns and they’re busy with doing their bridges, and their restorative work and I don’t think perio is a big issue to them....We do things that are distinct from a dentist, distinct from other careers. (Participant 23, Diploma Student)

One degree educator presented a contrasting view concerning the distinction between dental hygienists and dentists. She perceived that dentists, hygienists, and preventive dental assistants (PDAs) provided similar periodontal (preventive) services, and therefore their roles overlapped. However, most participants, when asked about their image of a dental hygienist, chose to make a distinction between dentists and hygienists.

**Occupational Aspects**

Within this category there were seven sub-categories. As well numerous dimensions of the seven sub-categories were identified. Discussion of this category of the first major theme, *Development and Profile of Dental Hygiene*, begins with the interviewees’ views about the history and development of dental hygiene.

**History and Development**

As dental hygienists and students discussed their perceptions of the history and development of the dental hygiene occupation, one dominant perspective was uncovered: that the evolution of dental hygiene was directly related to, and influenced by, the occupation’s association with dentistry. One participant, who had been a hygienist for many years, recalled that at the inception of dental hygiene in Canada in the late 1940s, the
occupational role of the dental hygienist was not well understood by the public or by dentistry itself.

*People would say to us "You're a what?" There was a great deal of interest and speculation about who we were and what we were. We were sort of news. I can remember the media coming. Who are these people? What do they do? We were.... Those who know what we were interested but the vast population and vast number of dentists didn't know who we were, what we could do, or why they needed our services.... We didn't have a lot of legislation. We were under what's called indirect supervision, so we went ahead and did what we were to do and there wasn't the regulation and supervision that there is today. And so, I guess that allowed us to think we were special. We knew we were a new profession. (Participant 15, Manager/Leader)*

This participant’s own experience points to the fact that historically the dental hygiene occupation, in its very beginning, had greater autonomy from dentistry than exists now. However, as the number of dental hygienists grew, a subservient and auxiliary hygienist role was established by the dental profession. Many participants stated that dental hygiene became a feminized occupation at the hands of male dentists. They perceived that the gendered nature of dental hygiene work was created by dentistry. That is, female dental hygienists were viewed by male dentists as possessing requisite feminine qualities, such as ‘gentleness’ and a ‘nurturing way’, which dentists believed were needed in order to provide preventive and educative services to their patients. These services were provided under the direct supervision of the dentist. One dental hygiene leader stated that in her view, the feminization of dental hygiene was not about special qualities possessed by hygienists, but rather dentistry’s way of creating an ancillary female workforce whose members would deliver services under the control of dentists. She made reference to the fact that when the first dental hygiene program in Ontario was established in the early 1950’s, admission was restricted to women. This structural constraint established and preserved the feminization of the dental hygiene occupation in Ontario for many years.

*That's our historical base and it was based on ideological constraints. I don't necessarily think that women are more nurturing than men. We may be socialized to that role.... In Ontario, admission to the University of Toronto was restricted to women over 19 years of age and that was in place until 1966 and so it put us.... It really put us strongly as a feminized profession. When a calendar of a university says that and so for male*
participation in a feminized profession, there's a stigmatic quality about that.... It's not as acceptable. Other males are not as accepting of males in what is [sic] traditionally feminized professions (Participant 15, Manager/Leader)

Another leader made reference to the fact that in the past, legislative requirements pertaining to the regulation of dental hygiene prevented men from entering the occupation. This legislation was based on gender stereotypes.

_There were actually some provinces who required dental hygienists to be female. There were all kinds of reasons given for this. But some of them that were given were surprisingly frank. You didn't have to pay them as much. They were more amenable to instruction. They were less likely to question or challenge the dentist on any issue and they were far less likely to want to be... to practice their profession independent of dentistry. So, I mean, this is what I mean when I said that gender issues are germane._ (Participant 27, Manager/Leader)

Neo-Marxist feminist theory argues that in the traditional household, women reduce the costs of labour by their domestic work, and that patriarchy in the household is functionally relevant in a capitalist society (Turner, 1987; Willis, 1989; Witz, 1992). When this theoretical framework is applied to the health care system, domestic work is transferred and reproduced by women in the workplace as they function in subordinate positions to reduce the costs of labor. Feminist theory (Witz, 1992) cites nursing as an example of a female dominated occupation that was exploited by the medical profession, which equates nursing with 'mothering' and sees nursing practice as an extension of women's domestic role in the home. By applying a Marxist feminist framework to understand the historical perceptions of participants in this study, it is argued here that the dental profession, a privileged occupational group, used patriarchal authority and control over dental hygienists to determine their services in the workplace. These services in turn mimicked women's role in the household.

Participants perceived that as dental hygiene developed in Canada, the public, and dental hygienists themselves, adopted the notion that women were best suited for the occupation and that they were meant to occupy a status subordinate to dentists. Hygienists and students acknowledged that this well established role is slowly changing with the
advent of dental hygiene self-regulation and independent practice, as previously discussed in the section Dental Hygiene in Transition. A community health practitioner articulated this change in the following exchange:

*Participant:* ... the hygienist is subservient to the dentist. Oh yeah. Not that I would like this or, or want this. It's just that I think that's the role that ... It's a historical role of the dentist being the boss. The dental hygienist being auxiliary which is not a very positive term and if you... I think that the public thinks of it that way - as the dentist is the boss and the dental hygienist is one of the girls in the office.

*Researcher:* Has that, you know. historical relationship... does that exist today or has it changed in your opinion?

*Participant:* It's changing. I think as, with independent practice, it will change because then the dental hygienist could be the boss and then I think maybe the public will be more aware.... It's not going to be a drastic change quickly, that's for sure. (Participant 34, Community Health Practitioner)

A degree educator in the study discussed another aspect of dental hygiene's history. She spoke about the formation of the Canadian Dental Hygienists Association in the early 1960's, a time which marked an increase in the number of hygienists nation-wide. The Association was established to foster unity amongst members of the occupation. Even while individual dental hygienists were subservient to dentists in the workplace at this period in time, dental hygiene at the occupational level was establishing itself as a national professional entity.

All participants perceived that the nature of the historical relationships between members of dental hygiene and dentistry paralleled the gender bound, stereotyped roles of men and women generally in society. In the past, women were not encouraged to seek training in traditional male professions such as dentistry or medicine. These opportunities were simply not open to women. Historically, hygienists were not seen by dentists to be committed to their careers long-term because of their other roles as wives and mothers. This belief by dentists, however, was not supported by research on the dental hygiene labor force conducted in the late 1980's. Johnson (1989), in a study of Canadian dental hygienists, found that:
Labour force participation... exceeded 75.0 percent for almost all age, marital and dependent status groups - that is, for almost every group, three of every four persons were in the labour force. There were two exceptions. Participation for respondents 55 years and over (N=48) was 60.4; for those with three or more dependents in the home, it was 74.0. All groups exceeded the 56.4 percent participation rate for Canadian women overall for 1987 (p. 192).

Participants stated that professional people were viewed as ‘males’ by the public and by the professions themselves. Men were seen to be authority figures and women were not. As such, dental hygiene evolved as a female, marginalized or para-professional occupation. Several participants claimed that the subordination of dental hygienists was analogous to traditional male and female roles in society, where wives were expected to be subordinate to their husbands.

... dental hygiene started out as being a women’s profession and really is still to a large extent. But I think a lot of people that chose to go into it were women who were really quite bright and so they probably had the ability that maybe 20 or 30 years later, they would have chosen to do something else that was very definitely a profession. But it was you know, a lot of times it was family or friends or expediency that meant that these women chose dental hygiene and so you have a group of bright people who may not have been happy with the status quo.... (Participant 40, Private Practice Practitioner)

Some participants, who were educated years ago in dental hygiene programs affiliated with dental schools, recalled that hygiene students were socialized into a subordinate position. While students were instructed by their teachers to feel proud about their chosen occupation, they were often segregated from dental students who were being educated in the same facility. One participant stated:

... More of a subordinate role I would say. I wouldn’t say it was passive. I would say it was subordinate to dentistry and we were.... Part of it was the socialization in the sense that we got the chance to work with the dentist at the dental school and I still believe that that’s a good model if used appropriately. However, the model there was you were only allowed.... You could only go up on the dental floor when you wanted to get a chart
from a dental student. You were only allowed to socialize with the dental students in the cafeteria. They really segregated us. They did not allow us to interact. We did not take classes with the dental students. (Participant 11, Manager/Leader)

Participants often drew comparisons between the history and development of dental hygiene and nursing. They perceived that the occupation of nursing, dominated by women, had been created to serve male physicians in the same way that dental hygienists served dentists. In their view, nurses occupied the same role as hygienists in terms of their skills in ‘preventive’ medicine and their abilities in ‘caring’ for patients. However, participants noted one distinct difference in their work environments. Nursing care was, and still is, most often provided in an institutional setting, where doctors have little or no direct supervision over the work of nurses, and hospitals (not doctors) employ nurses. Conversely, dental hygiene services were and still are, delivered in a private dental practice setting where dentists direct and control the work of hygienists in employer/employee relationships.

Most participants felt that dental hygiene’s historical foundation of male domination with no control over the development of the occupation, has created an ongoing negative effect on the status of the occupation, and has created a pattern of traditional stereotyped roles between male dentists and female hygienists. A few participants stated that dental hygienists have let themselves be subservient to dentists, and that this behavior has shaped the occupation’s low position in the dental division of labor. They also perceive that the gendered power imbalance between dentists and hygienists has deterred men from entering this field.

Well, I think that we are battling you know centuries of male domination and I can’t imagine that that doesn’t have some sort of impact on how we as professionals are viewed. You know, I think that it is slowly changing but I do think women are at a disadvantage when it comes to any kind of situation where power is an issue.... I think that the way that dental hygiene has been in the past doesn’t look very attractive to a lot of men and again I think it’s because you know we’ve contributed to a situation where we’ve let ourselves sort of be subservient and you know because of what society expects of men, a lot of men aren’t attracted into it. (Participant 42, Community Health Practitioner)
Some participants alluded to the fact that as women's roles in society have changed and their status increased, some dental hygienists have attempted to alter their subordinate relationships with dentists.

*If we'd been men, we wouldn't have put up with this for all this time.... So I see dental hygiene's development somewhat in relation to women's development. You know women are getting stronger and getting out there and saying how it is in many more ways than ever before. And I think the fact that we're mostly a female group to this point just reflects some of those things. So we're coming along but I think we still have a ways [sic] to go both as women and as dental hygienists. (Participant 37, Degree Educator)*

Further description of these relationships will be presented in this chapter's section on Relationships between Dental Hygiene and Dentistry.

**Image**

In discussing the images of dental hygienists, respondents were most likely to identify the public and some dentists as negative sources. At present the public's knowledge of hygienists is seen to range from non existent to minimal awareness. The most frequent statement made about public image was that dental hygienists were not distinguishable from dental assistants or other workers in the dental office setting. Less importance was placed on the fact that some of the services provided by these individuals overlapped. A dental hygiene practitioner stated:

*A lot of the public had no idea of the difference between a dental assistant and a dental hygienist and over the last few years with us going for independent practice and the work that has been done, I think that people are more aware now. But there are still a lot of people out there that really don't know the difference between us and that will come with time. (Participant 30, Private Practice Practitioner)*

Participants felt that patients/clients viewed the dental hygienist as the dentist's helper and as someone who was female, wore a uniform, occupied an auxiliary role, and was the "girl who cleaned teeth". Those members of the public who had an awareness of dental hygiene were perceived to view hygienists as 'technicians' and not as professionals. In the minds of the participants, the notion of a technician created a negative image of hygienists.
Further, a ‘subordinate role’ image of dental hygienists was viewed by participants as common amongst patients because of the visible domination of dentists over hygienists.

An excerpt from an interview with a diploma educator illuminates this finding.

... I think that the public thinks of it that way, as - as the dentist is the boss and the dental hygienist is one of the girls in the office. (Participant 34, Community Health Practitioner)

Researcher: How do you think the public views dental hygiene?

Participant: I think as sort of a quasi professional. I don’t see them thinking of it as I, as quite as strongly I guess as I would like them to see it. I think they still have some difficulty knowing, within the dental office, you know, what roles each play and so they (in large instances) are still... Think of them as “Oh, yes, some of the girls in the office” knowing that they may provide them some very good service but still have some confusion as to really what total role the hygienist can play. I don’t know that they have a really good understanding of what service that person can offer them. (Participant 29, Diploma Educator)

A dental hygiene leader stated that the public views hygienists as caring individuals and effective communicators, but not as providers of critical services. She claimed that this view contributed to the low occupational status ascribed to dental hygiene by the public.

.... By and large I think you’ll find that the majority of the public doesn’t know who we are and what’s more, don’t really care.... The comments I’ve heard from a lot of people from public, members of the public, are they’d rather see the dental hygienist than the dentist anyway because it’s a preventive aspect of things.... There’s more caring and empathy and so forth. But generally speaking, I think that on the health care continuum I think in the public’s eyes, we are very low down the list.... We don’t deal in life and death.... We don’t deal with pain.... It’s not our focus. (Participant 11, Manager/Leader)

One participant, a community health practitioner, raised the issue of hygienists’ academic qualifications, as they relate to public image. She claimed that because dental hygienists are not qualified at the bachelor degree level for entry to practice, they are viewed by the public as technicians. Further in the public’s view, hygienists as technicians and not professionals, are seen to be locked out of ‘decision making circles’, are not prepared for leadership and management roles, and are not seen to make a valuable contribution to oral health care.
Many participants claimed that the public’s image of dental hygienists has been impacted negatively by the ways in which dentists interact with hygienists in the presence of patients. When hygienists are treated as workers and not as colleagues, when they are referred to as ‘girls’ rather than by their names or professional title, and when they practice under the direct supervision of dentists, participants believe that their professional image is compromised. This claim by participants was illustrated in the following statement:

*I don’t think the public really yet clearly understands dental hygiene, and how we - who we are and how we’re different from dentists or other members of the dental team. I think a lot’s gone on in dentistry again in the private practice setting and with us being regulated by dentists to keep us invisible. It’s pretty tricky in a private practice environment where you know, it may be that the only male on the team is the dentist and then there’s a whole flock of females doing other things and just exactly who are those people?* (Participant 37, Degree Educator)

Participants believe that the public’s image of dental hygienists will develop under certain conditions, for example, as an outcome of self-regulation or media campaigns designed to raise awareness. It is not only the image held by the public that is detrimental to the dental hygiene occupation, however, the relationship between dentists and hygienists also requires attention.

Several participants stated that the dental profession viewed dental hygiene as an ‘arm of dentistry’, and not as a distinct practice. Dentists were seen as controlling the work of hygienists by the delegation of specific ‘dental’ services which were provided, in most cases, under the direct supervision of a dentist. These perceptions were reinforced through content analysis of the Nova Scotia Provincial Dental Board (1992) regulations concerning dental hygienists which list specific procedures that can be delegated to a hygienist by a dentist. Under these regulations, a dentist must be physically present in the dental office when a hygienist performs dental hygiene services.

Overall, participants were very candid about their own experiences and thoughts concerning dental hygiene’s public image. They did not hesitate to admit that the occupation of dental hygiene was not well known to the public or other professional groups. Participants believe that governments are more aware of dental hygiene than the
public is, largely due to recent changes in legislation concerning dental hygiene self-regulation. Although interactions between individual hygienists and their clients were viewed as positive, clients were perceived to have little understanding of the professional role of hygienists or their background.

Culture of Dental Hygiene

The culture of dental hygiene is composed of individual members (dental hygienists) and organizations (professional associations). The researcher's understanding of this culture was derived from the beliefs, values, attitudes, and experiences communicated to her by the participants. The interpretation of these factors was enhanced by her own insider role. This sub-category of Occupational Aspects reveals several components of the culture of dental hygiene including a review of the Meaning of Culture and four Cultural Dimensions.

Meaning of Culture

Theorists of symbolic interactionism view culture as the "consensus" of a group consisting of language, knowledge, skills, and shared understandings, as well as the rules that exist to govern behaviors (Charon, 1989). Shibutani (1955) described culture as the shared perspective of a particular group or of a society. A group's perspective or frame of reference becomes the group's reality. Mead (1934) used the term "generalized other" to describe a shared body of rules which depicted the culture of a group. Symbolic interactionists argue that although a culture represents a set of established behaviors, norms, beliefs (ideology) and meanings which are developed over time, culture is also negotiated.

Culture arises in and is changed in interaction as people put forth the particular meanings and ideas that they believe in. Interaction validates past
culture, and it revises what is known. It involves conflict and negotiation where actors compete - it is “almost like a battle over whose and which definitions prevail as the basis for future interaction”. (Stryker, 1980, p. 57)

The work of ethnographers is to describe cultures (Spradley, 1980; Lofland & Lofland, 1984). From their perspective, a culture is made up of three basic aspects of human experience: behaviors (what people do), knowledge (tacit and explicit), and the things people use (artifacts). Culture cannot always be observed directly; it is understood through interactions with people. In this regard, Spradley (1980) refers to the importance of ‘cultural themes’ which are patterns of recurring messages or organizing principles that are communicated by the members of a culture. The ultimate goal of ethnography is to identify the passions, meanings, and patterns of a bounded cultural group (Crabtree & Miller, 1992).

Recently, the concepts of culture, class, and gender have been applied to the study of health professions and professional projects. In a study of medicine and nursing, Walby and Greenwell (1994) described the cultural variations that existed between members of the medical profession. Their research demonstrated that cultural attitudes, with respect to physician’s working relationships with nurses, differed geographically and also varied according to work setting and the social/cultural mores of the society in which they lived. Those cultural attitudes of male physicians which imputed an inferior status to women resulted in interprofessional conflict between nurses and doctors. Savage, Barlow, Dickens, and Fielding (1992) have examined the way in which occupations are controlled, and how claims to privileged professional positions are developed and sustained. They posit that knowledge, credentials, and respectability are critical for maintaining a professional monopoly. From the standpoint of professions, a group’s cultural assets are closely tied to their economic position and to their capacity to exploit others (Macdonald, 1995). This brief discussion of the concept of ‘culture’ serves as the framework for the
researcher's conceptualization of the cultural dimensions of dental hygiene uncovered in this study. These dimensions include sub-groups within the dental hygiene occupation, occupational values, gender issues, and the position of professional associations.

**Cultural Dimensions**

The culture of a small group, organization, or a society is shaped by established beliefs, values, and actions. A culture is not necessarily static but subject to forces of change. Evidence for the fluid nature of the dental hygiene culture is presented in the following discussion of the cultural dimensions of Sub-Groups, Values, Gender, and Professional Associations.

**Sub-Groups.** Based on the perceptions of participants, the culture and occupation of dental hygiene appears to be divided into two different types or groups of dental hygienists: those who see themselves as ‘professionals’ in the traditional sense (public service, code of ethics, abstract knowledge, etc.), and those who view themselves as ‘non-professionals’ or ‘technicians’. Professionals are viewed as being concerned with the professionalization of dental hygiene and technicians are perceived to be satisfied with the status quo. This perspective is reflected in the statements below:

*Participant:* Well, I think the majority of hygienists are practitioners, clinicians and I think they get caught up into the, the production of work and ... I think the majority of hygienists go to work and I think they go home and they don't think about it and they get their C.E. [continuing education] credits and they go to courses and they may learn something but I think most of them are....

*Researcher:* Do you think most of them think of themselves as professional people?

*Participant:* I don't.... Not, not most. I think there's a whole bunch that do but I, I don't think a lot do. (Participant 41, Manager/Leader)

Participants consistently reported this finding, and there was little variation regionally. However, participants in Atlantic Canada most often attributed the division in the dental hygiene culture to the legislated authority and control of dentists and dentistry. That is,
they claimed that many hygienists were prohibited from developing professionally at the individual level and at the occupational level. In Ontario, the dental hygiene model of education was viewed as failing to provide adequate time for the professional socialization of recruits. Consequently, the ‘professional role’ of the dental hygienist was never fully developed in the minds of students during their educational preparation for practice.

Professional hygienists were described as those who applied research findings to their practice decisions, were concerned with improving their own level of education, had great pride in their profession, a positive self-concept, and were very ‘caring’ in their interactions with clients. Participants perceive that non-professional hygienists are technically oriented, meaning that they provide a therapeutic service for clients, are not as concerned with a holistic approach to health care, and generally have a poor self-image of their occupational role. Several participants claimed that this type of hygienist enters dental hygiene for several reasons: a short training period, good occupational status, stable employment and a good income upon graduation.

One community health practitioner made reference to a well known American dental hygiene leader who referred to professional dental hygienists as “neck up” clinicians and to non-professional ones as “neck down” practitioners. The former were viewed as those hygienists who consistently applied theory and research to their practice and the latter were mostly concerned with “doing the work” and not fully utilizing their knowledge base. A private practice practitioner from Atlantic Canada was critical of hygienists who viewed dental hygiene as merely a job rather than a professional career. She claimed that many of these practitioners allowed themselves to be subordinate to dentists and that this subordination prevents dental hygiene from achieving a higher occupational profile.

... The same if you’re in an individual office, you may have the dental hygienist whose quite happy to live in that subordinate role. Believe me there’s a whole lot of them are happy to live in a subordinate role in the dental office. I’m not saying they all do and it works well. Or you may have the dentist who is not into power and control and is quite happy to work with a dental hygienist on an equal footing. (Participant 11, Manager/Leader)
Many participants distinguished professional from non-professional hygienists by labelling the former as 'leaders' and 'visionaries' and the latter as 'followers'. They believed that professional hygienists were most likely voluntary members of a professional dental hygiene organization and that non-professional types were not members.

One of the documents analyzed in this study also acknowledged the idea of a subdivided dental hygiene culture, that is, professional hygienists who pursue careers and non-professional hygienists who see themselves as having jobs. Goulding (1993a), editor of the Canadian Dental Hygienists Association journal stated:

Do you have a job or career? I know some hygienists who have jobs. I also know hygienists who have incorporated dedication into their jobs and have turned them into careers. Additional investment in further education and personal commitment to the profession has turned many of these career people into fine professionals. Now we must make this the rule rather than the exception. Our leaders have cleared the way for us to advance to a higher plateau of responsibility. We all want it; but are we willing to back them up and do what it takes to be worthy of it? It may be some time before all of our labouring hygienists transcend to having careers. (p. 3)

This document clearly associates the professional concept of dental hygiene with individual members of the occupation who see themselves as having careers and not jobs. However, all of the other publications of the Canadian Dental Hygienists Association related to dental hygiene education standards, practice, and ethics refer exclusively to the 'professional role and behaviors' of dental hygienists (CDHA, 1992a, 1992c, 1994c, 1994d, 1995b, 1999).

In this study of dental hygiene's culture, a sense of a professional identity was not perceived by participants to be held by all dental hygienists. Collectively, hygienists do not appear to have a singular self-concept. One component of the culture sees itself as
professional and another, as non-professional technicians. These same cultural themes also emerged from sections of the interviews that uncovered participants’ perceptions of the dental hygiene role and occupational image. Some participants claimed that the domination of hygienists by dentists contributed significantly to the way in which the culture of dental hygiene has been shaped.

**Values.** When participants were questioned about the values that guide dental hygiene as an occupational group, their responses were consistent. They stated that dental hygienists value health and wellness, respect for others and ethical behaviors, and their ability to help people. Further, they value their interpersonal relationships with clients and, to that end, they exhibit effective communication behaviors and skills. Dental hygienists are perceived to be task-oriented and perfectionists. Many, but not all, participants expressed a ‘sense of pride’ in their work, irrespective of the different dental hygiene roles (practitioner, educator, etc.) that they occupied. All participants perceive that the occupation of dental hygiene is knowledge based, constituted by basic or clinical science knowledge and more tacit applied knowledge. The latter type of knowledge is often used by the dental hygienist during a client oral health assessment or during communication with clients. A negative observation that was made by a large number of participants (excluding diploma students) was that some of the occupational values possessed by practitioners were compromised as a result of some tight controls placed on the work of dental hygienists by dentists. This will be discussed further under the major theme of Relationships between Dental Hygiene and Dentistry.

The shared cultural values, behaviors and understandings described by the study participants were reinforced and extended through content analysis of the Canadian Dental Hygienists Association Code of Ethics (1992a). The Code clearly specifies the norms and values which must be followed by dental hygienists to direct their behaviors. Relevant passages in this document are presented below.
The practice of dental hygiene can generally be defined as a helping relationship in which the dental hygienist assists the client, and society in general, in achieving and maintaining optimal oral health. Dental hygiene has an identified body of knowledge and distinctive expertise. The Code of Ethics sets down the value and standards of the profession of dental hygiene. The values express the broad ideals of dental hygiene while the standards are moral obligations that have their basis in the dental hygiene values. Standards provide more specific direction for conduct than do values, and specify what a value requires under particular circumstances.

The dental hygienist has an obligation to treat clients with respect for their individual needs and values.

The dental hygienist has an obligation to hold confidential all information regarding the client learned in the health care setting.

Based upon respect for clients and regard for their right to control their own care, dental hygienists must respect the right of choice held by clients.

The dental hygienist is obligated to provide competent care as currently described in The Clinical Practice Standards for Canadian Dental Hygienists in Canada.

The dental hygienist, as a member of the dental profession, is obligated to take steps to ensure that the client receives competent ethical care.

The dental hygienist is obligated to uphold the ethics of the dental hygiene profession before colleagues and others. (pp. 1-6)

The insights of participants concerning the values that dental hygienists embrace, such as respect for others and ethical practice paralleled the content of the CDHA Code of Ethics. This ethical guide also refers to hygienists’ professional obligation to be competent in their work and to protect the privacy of their clients. The knowledge and skills required of dental hygienists, as defined by the national professional body is documented in the following excerpt:
Dental hygiene practice is based on an increasing body of knowledge based on research in dental hygiene, biological sciences and social sciences and technology.

Dental hygienists value and actively pursue acquisitively new scientific and clinical knowledge. (CDHA, 1995b, p. 3)

Again, participants and the national professional association of dental hygiene emphasized the knowledge foundation of dental hygiene practice. Generally, document analysis related to the cultural guidelines of the dental hygiene occupation disclosed a discrete set of requisite skills, knowledge, values, behaviors, and rules.

Gender. Participants frequently voiced the fact that the occupation of dental hygiene is dominated by women. They pointed out that in their experiences, the feminization of the occupation caused individual members and the occupation as a whole some difficulties. For example, several participants stated that certain perceived feminine qualities such as cooperativeness, nurturing behavior, and submissiveness prevented dental hygienists from being "taken seriously" by government, dental associations, and even the public. Some participants acknowledged however that society's views of masculine behaviors are changing, and that males are perceived to exhibit more compassionate, caring, and empathetic qualities now than they did historically. As such, female and male traits are becoming more closely aligned. Participants perceive that this shift has contributed to an improvement in the status of women. The following quotation illustrates the belief of most participants that men and women are equally suited for dental hygiene practice.

*Researcher:* You've made reference to "women" in dental hygiene. Would your image of a male dental hygienist be different and how so?

*Participant:* ... if I've seen two or three of them at a time in my teaching experience, that there's one that absolutely doesn't seem to fit the mould; like of what the typical dental hygienist appears to be and then the others very much fall in that category. That they, they appear ahh very sensitive, very you know very good with their hands so you know, their, their,
motor-hand-eye coordination, you know seems very good. (Participant 27, Manager/Leader)

The culture of dental hygiene, comprised primarily of caring women practitioners, has been shaped by the patriarchal attitudes of members of the dental profession and reinforced by the benevolent beliefs of female members of dental hygiene. A well established system of dominance and intimidation by dentistry has perpetuated a dental hygiene culture that does not appear to be inviting to men, who are perceived to be more aggressive and less easily threatened than women. Many participants expressed the view that if increasing numbers of men entered dental hygiene the occupation’s status would increase, and employment conditions for hygienists would improve generally as male dentists would likely treat male hygienists more respectfully.

Professional Associations. When participants were asked about their understanding of a professional culture they described a “sense of community” as one of the elements that makes up such a culture. Professional dental hygiene associations were cited as the ‘most responsible’ for bringing together the community of dental hygiene members. An annual national dental hygiene conference hosted by the Canadian Dental Hygienists Association was identified as the single most important event which fostered a feeling of occupational unity, single-mindedness and coherence amongst hygienists. Many participants indicated that in their experience, very often the time during which “grass roots hygienists” (i.e., private practice practitioners) conversed on ‘professional’ issues or topics is when they attended conferences. This was based on their perception that hygienists usually preferred the support of a group environment in which to openly discuss professional issues.

Participants pointed out that at the national level, the culture of dental hygiene is cohesive in nature, with individuals (elected/appointed officials and staff members) possessing similar thought processes and ideals. The national dental hygiene journal publication was cited as an example of the way in which professional associations communicate and reinforce the values and beliefs of the culture to its members. The
'collective culture' of dental hygiene was further strengthened by economic assets (a national professional office building located in Ottawa) and organizational assets (a national bureaucratic organization, a governing board and a national constitution). Economic, cultural, and organizational assets are viewed as symbolic of professional groups (Macdonald, 1995). CDHA claims that it "represents the majority view of dental hygienists across Canada" (Mitchell, 1992b, p. 3), another sign of a strong culture. The Association was viewed as being the link which joined provincial dental hygiene associations to the national organization in an effort to create a community of dental hygiene.

Content analysis of the Canadian Dental Hygienists Association/L’Association Canadienne des Hygienists Dentaires Constitution and By-Laws (1992b) revealed the powers of the organization to enculturate its members. For example, members of CDHA are charged a lower conference registration fee than non-members for the 'privilege' of attending the Association's professional conference. The conference is promoted as a "scientific meeting" during which time, participants acquire new knowledge of the art and science of dental hygiene. The Association directs the work of its volunteer members of the Board of Directors and conducts official business under "Robert’s Rules of Order". These examples demonstrate that the culture of dental hygiene that operates at the organized level declares its strength and unity in a variety of ways.

In summary, the values, beliefs, rules and ethical principles among individual hygienists are consistent. However, the content of participant interviews uncovered the apparent existence of two cohorts within the dental hygiene culture: one whose members see themselves as professionals and another whose members occupy the role of technician/non-professionals. The Canadian Dental Hygienists Association was identified by hygienists as the strongest and most focussed component of the culture. It would seem that those hygienists who see themselves as technicians, and not professionals, may not be influenced by professional dental hygiene organizations such as the CDHA.
Organized Dental Hygiene

The term "organized dental hygiene" as used in this study refers to professional agencies or organizations which represent the dental hygiene occupation and its members. Participants were not interviewed specifically about dental hygiene organizations, however. many hygienists incorporated the function of provincial and national professional associations into the discussions. Most of the individual members of provincial dental hygiene associations were not seen to be active in these organizations, that is, they did not volunteer their services but supported such organizations through membership fees. However, those hygienists who volunteered for service, or were elected or appointed to official positions were viewed as making an important contribution to the growth and development of the dental hygiene occupation.

Many hygienists made reference to the effectiveness and strength of the structure of the Canadian Dental Hygienists Association. That is, specific councils with assigned directives and appointed members were described as highly functional and successful in accomplishing the goals of the Association. The CDHA was seen to manage its business by a democratic group process versus a hierarchical and authoritarian structure. Participants also stated that dental hygiene organizations needed to be more active in nurturing individuals to assume leadership positions or to become involved in some capacity. This thought was reinforced by the President of the CDHA in 1991 in a journal publication.

As a member of CDHA you have both the right and the responsibility to help provide direction in the planning for the Association. You may have input in several ways. Consider active involvement with your association at the local or provincial level, as it is through this process that leadership comes to the CDHA Board of Directors. Share your ideas and concerns with members of the CDHA Board in your province to assist them in assessing, planning and evaluating our national activities. Write to me, as
your President, to let us know how you feel about what we are doing on your behalf and in the interest of the health of the Canadian public. (Frizell, 1991a, p. 6)

Participants identified the guidance of dental hygiene leaders who had a ‘shared vision’ as critical to the development of the occupation. Dental hygiene manager/leaders, in particular, acknowledged that the CDHA, from the time of its inception in the mid 1960s, has evolved into a large and dominant force in the occupation’s growth. They claimed that CDHA has developed an effective infrastructure and has increased its human and financial resources over the past few decades.

The greatest number of statements made by participants about organized dental hygiene concerned the roles of professional associations. The CDHA, followed by provincial organizations, was labelled as the ‘major player’ in guiding dental hygiene on a path towards professional status. Participants recognized the primary role of the Association in developing a framework for dental hygiene education, research and practice standards. They identified the fact that dental hygiene organizations often provided the ‘bridge’ for individual hygienists to remain connected to their profession and to the process of ongoing learning. Participants asserted that typically hygienists worked in isolated practice settings where they had minimal or no peer involvement with other hygienists with whom they could discuss dental hygiene matters. A diploma educator stated:

Once they leave school, they’re working in a very isolated environment. They may or may not stay plugged in through a professional organization and that professional organization may or may not meet needs in terms of continuing education and helping to ensure the hygienist has the network necessary to develop the confidence to take on that self responsibility for what they do. (Participant 14, Diploma Educator)

However, professional associations were recognized for their role in organizing continuing education offerings and conferences and for promoting the notion of study clubs, where hygienists come together to discuss the theory and practice of dental hygiene.
Several participants cited the role of associations in implementing strategies, such as media campaigns, to improve the public’s awareness and knowledge of dental hygienists. The participants’ perceptions about the roles of dental hygiene organizations described above were supported by the documented goals of the CDHA (1995a). However, the CDHA goal of oral health promotion was not mentioned by participants. This may suggest that the participants perceive that the most fundamental role of the CDHA is to work towards developing the interests of its members and the occupation as a whole.

Many hygienists talked about the growing use of political and government processes by organized dental hygiene to bring about change in its occupational status. Legislative changes pertaining to the regulation of dental hygiene were most often discussed. In the minds of participants, the politicization of dental hygiene is associated with the activities of professional dental hygiene organizations and their interests in placing the occupation on political agendas.

*Like I look at us as, as political neophytes. We’re new in this game.... I think we’re, I think dental hygiene has sort of seen the political arena as a distasteful kind of thing by and large and I’m not saying it’s not but I think, I think we’ve made better headway when - since we’ve, we’ve acknowledged that politics may be the way that - may be the way to go; but that’s where actually decisions get made. (Participant 37, Degree Educator)*

The above statement by a dental hygiene degree educator reflected the growing recognition and acceptance on the part of many of the participants, that government support for dental hygiene services will contribute to the professional status of dental hygiene. Associations, especially the CDHA, were considered to be powerful in their role as change agents. Their active members and leaders were seen as ‘risk takers’. The CDHA was known by participants to have assisted provincial dental hygiene organizations in developing political lobbying skills and strategies. Document analysis confirmed the position of the CDHA in this regard. The following passage authored by a CDHA President is an example of the Association’s support for dental hygiene activity in the political process.
 Appropriately, CDHA as a national association does not have an active role in provincial practice and regulation issues. However, the CDHA Practice and Regulation Council does provide support to provincial associations who are addressing licensing and regulatory concerns. Resources are available from CDHA to assist provincial associations with government relations, lobbying, and political initiatives. (Frizell, 1990, p. 157)

The goals, objectives and activities of organized dental hygiene were consistently reported by participants in a positive light. During the course of participant interviews these organizations were recognized for the valuable contributions they make to the dental hygiene community, both at an individual and at an occupational level.

**Dental Hygiene Issues**

The interview data brought to light four recurring dental hygiene issues. The most significant issue that was raised by participants concerned the practice by many dentists of controlling the immediate work environment of dental hygienists in private dental offices. This issue impacts on the professional ethics of dental hygiene practice and employment conditions. Participants claimed that in many situations, dentists are motivated by economic interests. As such, they direct hygienists to compromise their practice skills, values and knowledge, and ethical behaviors in order to “treat” more clients and generate more revenue for dentists’ practices. Although none of the participants had experienced this situation themselves, they were aware of other dental hygienists who had, and they also believed that this was a regular occurrence in dental practice. They explained that frequently, hygienists experienced a conflict between their educational preparedness to enter dental hygiene practice and the realities of practice in the dental office setting. One participant spoke about this issue from her perspective as an educator:

*I think also we get caught in a conflict between what we’re prepared to do educationally and then what the employment situation is; and, and I used to*
This dental hygiene educator expressed her own personal difficulty with instructing students in dental hygiene practice procedures that she deemed would never be actualized in practice because of dentists' control over the work of hygienists.

Participants suggested that when hygienists experience this workplace issue they are confronted with difficult choices including: voluntarily leaving the employment situation, conforming to the practice situation thereby sacrificing their professional beliefs which may lead to unethical conduct, or remaining in the practice with the idea of trying to alter the situation. They have to consider the potential consequences of non-compliance (potential loss of job) or compliance (unprofessional and unethical actions). A diploma educator stated "... if you take a stand ethically in your work place, you are going to lose your job.... Altruism and survival are in conflict" (Participant 14, Diploma Educator). Ultimately, this dental hygiene issue has the potential to negatively affect individual dental hygienist's professional identity and self-concept, and the credibility of the occupation itself.

A second issue, that of gender, is related to the interrelationships between the occupations of dentistry and dental hygiene and between individual dentists and hygienists. Participants referred to this issue throughout the interviews. To recapitulate, at an individual level, the working relationships between dental hygiene and dental practitioners frequently reflect traditional female and male roles in society. This traditional sex stereotyping causes hygienists to feel professionally insecure and undervalued. It also challenges their abilities to develop professionally when they work under the direct authority of dentists. Issues of gender at an occupational level are believed to inhibit and curtail dental hygiene's professionalization. Participants felt that the gendered nature of
dental hygiene has negatively affected its public image, and has slowed down the occupation's efforts to raise its status and to be recognized as a professional entity by government, the public, and other professions. A diploma educator stated:

...I think it's harder to convince powers that be of change and I see this all the time when I'm dealing with government levels - that I can go in and say one thing and I know that obviously, you know I may be biased thinking I said it as well as the next person. But looking at the next person who may be male from usually dentistry, says the same thing even if it's on our behalf, even the same thing I believe with the same clarity.... I think it's harder to be taken seriously. (Participant 29, Diploma Educator)

This statement suggests that the same thoughts or ideas that may be expressed by a male dentist and a female dental hygienist to members of government would be received in different ways, that is, the dentist would be viewed as more credible. A few participants suggested that when dental hygiene leaders and other representatives of the dental hygiene community display in public, what are historically labelled as 'feminine traits' such as compliance, these behaviors interfere with professionalization efforts.

Researcher: Do you think the fact that dental hygiene is predominantly female affects its professionalism?

Participant: Yeah, I do.... I say that solely on the basis of my experience of how much agony we did go through in terms of making the decision to take the risks associated with seeking self-governance in this province and then we turned, and when we were in the throws of the agony and, and waffling about you know, upsetting the apple cart. "Oh, you know, this wouldn't be nice" and all that kind of female stuff. (Participant 37, Degree Educator)

Some dental hygienists in the study acknowledged that, although historical and traditional relationships continue to dominate dental hygiene and dentistry, there is a desire by hygienists to alter these traditional roles.

A third issue, which has been previously discussed in this chapter, and the previous is the public's lack of awareness of the dental hygiene occupation and a lack of knowledge of the background of dental hygienists. Participants perceive that hygienists do not have a distinct identity in the minds of the clients that they serve. Dental hygienists want to be recognized by the public and others for their education, knowledge and skills. Participants
believe that the issue of public unawareness hinders the evolution of dental hygiene as a health profession.

Many participants identified inadequate research in all aspects of dental hygiene as a fourth issue for the occupation. They spoke of a lack of a clear research agenda, poorly defined clinical practice parameters, and insufficient human and financial resources needed to conduct research. Participants claimed that research must be the basis for developments in clinical dental hygiene practice. The term “evidence based” practice was frequently used to describe the need for studies designed to validate clinical techniques used by dental hygienists. Document analysis also supported the growing demand for research based practice. The CDHA Mission/Vision Statement (CDHA, 1995a) states “dental hygiene practice is based on an increasing body of knowledge based on research in dental hygiene, biological sciences and social sciences and technology” (p. 3). This same goal was stated in a more recent version of The CDHA Mission/Vision Statement (CDHA, 1999a) as simply “committing to sound research” (p. 2). Participants in this study and representatives of organized dental hygiene (as identified through the CDHA publications named above), affirmed that the issue of insufficient dental hygiene research is a matter of concern to the occupation.

Dental hygiene issues were related to factors internal to the occupation itself; namely an inadequate research base and a predominantly female work force, as well as external variables which included public image and relationships with dentists. Participants perceived that these were long-standing issues for dental hygiene, which need to be addressed at both the individual and occupational level.

**Regulation of Dental Hygiene**

Of the two most recent developments in dental hygiene, that is, self-regulation and independent practice (dental hygienist owned and operated practice), numerous participants
initiated discussion of the regulation of dental hygiene. The issue of regulation for these participants is that dental hygiene has not achieved self-regulation in all provinces. Professional governance or self-regulation encompasses responsibility for licensing, standards of education, quality assurance, continuing competence of members, complaints, and discipline measures (Wood, 1992). The shift in provinces such as Ontario and British Columbia, from regulation by dental boards comprised of dentists, to regulatory bodies composed primarily of dental hygienists, was viewed favorably by participants.

The primary reason cited for support of self-regulation relates to dental hygiene’s desire to govern itself instead of being governed and controlled by dentistry. Examples of self-regulation outcomes, such as the potential opportunity for an expanded scope of practice and a broader range of employment settings, outside of private dental practices, were discussed during the course of many interviews. Participants perceived that in the absence of self-regulation, the dental hygiene occupation will only be able to maintain the status quo and will never develop as a profession. However, several hygienists cautioned that the public’s perception of a self-regulating occupation did not necessarily ensure that their image of dental hygiene would rise to the level of professional status.

Many participants believed though that self-regulation will provide dental hygienists with the legal framework to “stand up to dentists” concerning professional practice decisions. They viewed self-regulation as giving hygienists “the leverage” they need to be able to practise dental hygiene in the way they were educated. This view was depicted in the following statement:

*When a dental hygienist finds herself in an ethical dilemma vis-à-vis the dentist and something which is being delegated to the dental hygienist, the dental hygienist who is self regulated has another option; or not another option but another consideration. We talked about the employer/employee. The dentist can terminate the employment but when you’re self regulating, if you contravene the legislation, the regulations then you will find yourself without certification. So not only will you not have employment but you’ll not be able to seek employment so that your first consideration as a self regulating professional, is to the legislation and to the regulations of the regulating body, and to their ethics and practice standards. (Participant 15, Manager/Leader)*
Further, participants believe that with self-regulation, dental hygienists’ self-concept will improve and they will develop a sense of professional worth. Again, however, self-regulation alone was not perceived by participants to lead to dental hygiene professionalization.

One participant claimed that dental hygiene’s pursuit of self-regulation was an expression of collective “feminist actions”. She suggested that gender issues and professional dominance were at the root of legislative changes to the regulation of dental hygiene. Dental hygienists no longer want to be controlled by dentists. Self-regulation in Ontario has given governing and decision making powers to hygienists. This participant exclaimed that:

... I see the feminism aspects of dental hygiene collectively, and I think a lot of the self-regulation is that feminism breaking through.... I think the self-regulation has come about because of the sense of where women are today in the world - that women do not want to be under a man’s thumb whether it’s a College of Dental Surgeons of whatever province or in a relationship and I think that breaking out - it’s, it’s time for it in our world. (Participant 41, Manager/Leader)

Another participant, from Ontario asserted that many hygienists were “anxious” about self-regulation. In her experience, “grass roots” dental hygienists in that province were not prepared either educationally or psychologically for occupational self-governance and the politicization of dental hygiene. She stated:

Practitioner: ... very much related to the fact that there are a lot of practitioners who had never taken any interest in what was going on and as a reflection of what happened in terms of the politics of dental hygiene in Ontario, they were almost forced to take a little bite of it.

Researcher: Can you explain a little bit more about the politics of dental hygiene?

Practitioner: The College - the creation of the College of Dental Hygienists and all of a sudden here we are, we’re governing ourselves. And what does this involve? And how are we going to do it? And do we really care as practitioners out there. I mean, are, how many of us really care? How many of us want to be self-regulated? I have a feeling that a lot of people were very frightened about it and still are very frightened. I think that if asked, it’s been a long time now - more than a year since I’ve seen anything written about it, but if asked they don’t want to be able to practice by themselves. They’re frightened. They’re afraid to....
Researcher: Why?

Participant: Why? Maybe because they realize they haven't been adequately prepared in an 8 month program. Maybe. (Participant 10, Degree Student)

If in fact apprehension about dental hygiene self-regulation is widespread among hygienists across Canada, this may have implications for the goals of the professional project of dental hygiene.

A leader from Ontario, who had been active in the self-regulation process, reported that dental hygiene self-regulation was achieved in the province because the government proclaimed that a conflict of interest existed for dentists as both the employers of hygienists and the regulators of the occupation. This was deemed not to be in the public's best interests. Another leader from British Columbia noted that with the advent of self-regulation in that province, the occupational status of dental hygiene seemingly increased in the minds of government representatives and for members of other health professions.

Document analysis of legislation pertaining to the regulation of dental hygiene, revealed contrasting depictions of dental hygienists as health care providers. Under Nova Scotia legislation, dental hygiene is regulated under the authority of dentistry (Nova Scotia Provincial Dental Board, 1992). Hygienists are described as subservient to dentists, and by law are dependent on dentists to carry out their work. The scope of dental hygiene practice is defined in terms of procedures that 'cannot' be undertaken by hygienists. Legislation in British Columbia, on the other hand, carries a more 'respectful tone' about dental hygienists as health professionals. The College of Dental Hygienists of British Columbia is charged with the responsibility of dental hygiene regulation in the province. In this province, hygienists work without dentist supervision and they have interdependent relationships with dentists. Dental hygiene practice is defined by reserved (protected) acts that recognize the skills and knowledge of hygienists (College of Dental Hygienists of British Columbia, 1994). Publications of the Canadian Dental Hygienists Association also support dental hygiene self-regulation as illustrated in the following excerpt from an article in the CDHA journal:
When the licensing body for dental hygienists is the provincial dental association or college of dentists, there is the potential for a conflict of interest.... With self-regulation, it will be dental hygienists who will be responsible for ensuring that only those individuals who meet the requirements of the regulations will be registered and licensed to practice as dental hygienists. With self-regulation it will also be dental hygienists who will have the responsibility to discipline and to pursue the illegal practice of the profession.... Challenging the dental community and possibly jeopardizing job opportunities will become less of a concern as self-regulation becomes a reality for more of the dental hygiene profession across Canada. (Frizell, 1990, p. 157)

The citation above, in addition to supporting the concept of professional self-regulation, also suggests that workplace issues between hygienists and dentists will be remedied by dental hygiene self-regulation.

Generally, participants indicated that the dental hygiene community desires self-regulation, and in many instances, has actively pursued changes in legislation related to the governance of the dental hygiene occupation by utilizing the political process. Dental hygienists want to “take charge” of governing their own occupation and reduce the authority and power of dentistry over dental hygiene.

Practice of Dental Hygiene

Participants described dental hygiene practice as educating clients about the prevention of oral diseases, promoting wellness, and providing clinical services. Many spoke about the “art and science” of dental hygiene. Reference was made to the “affective” qualities (art) of dental hygiene practitioners, such as sensitivity to clients’ needs, empathy and compassion, and above average communication skills. The science component of
dental hygiene was viewed as an incorporation of basic sciences, clinical sciences, technology, and the application of these elements to practice. Several participants portrayed the ethos of dental hygiene practice to be a focus on the “holistic health” of clients. They outlined a client-centered approach to care, whereby the client is an active participant in planning their own oral health care. An excerpt from a 1995 CDHA mission statement reinforced the viewpoint of participants.

CDHA believes that oral health is integral to general health and oral health care is an integral part of comprehensive health care.... In all roles and practice environments, the dental hygienist works with the client and, using dental hygiene process, bases all assessment decisions, and interventions on current dental hygiene research and theory.... Dental hygienists are sought to assist clients to be knowledgeable and responsible in choosing optimal oral health behaviors.... Dental hygienists create opportunities to enable clients to achieve optimal oral health. (CDHA, 1995a, p. 2)

The CDHA asserts that the primary role of the dental hygienist is to provide clients with the knowledge and tools that are necessary for clients to make informed choices about their oral health. Participants also claimed that hygienists consider socio-economic, cultural, personal, and health factors related to the client in planning care.

**Realities of Practice**

Dental hygienists addressed the issue of regulations concerning the practice of dental hygiene. They indicated that in those provinces where dental hygiene is regulated by dentistry, dentists are required to examine patients, make a diagnosis, and prescribe treatment prior to the initiation of dental hygiene services. However, several participants reported that in reality, hygienists frequently deliver dental hygiene care to patients before
they receive a comprehensive examination by the dentist. That is, what is supposed to happen in theory does not always occur in practice. Hygienists want governing legislative acts to reflect the realities of practice (Mitchell, 1992a). Another variation that was disclosed by participants concerned provincial differences in the scope of dental hygiene practice. They suggested that the practice of dental hygiene should be standardized nationally, meaning that the scope of practice would be equivalent across provinces. This would permit public access to all the services that hygienists provide under legislation, and would allow hygienists to practise anywhere in Canada. Portability implies that hygienists would be licensed to practice in any jurisdiction of Canada, without further examination. In effect, if such standardization was achieved, dental hygiene as an occupational group would be more cohesive.

A number of participants raised questions about the appropriateness of the dental hygiene model of practice that existed in most private dental offices. They implied that as hygienists move into new practice settings, such as multi-disciplinary health centres, that a new or modified model would have to be developed to adapt to these workplaces. Although they did not articulate the details of a new model, they indicated that it should not be based on the historical hierarchical practice of dentists directing and supervising the work of hygienists. Rather, a new model should be "collaborative" in nature; relationships between professional persons would be interdependent and a holistic approach to client care would be the norm. They suggested that dental hygiene education curricula would also have to be altered to reflect a new practice model.

Repeatedly, participants cited examples of the reality of dentist control over dental hygiene practice. Despite the qualifications of hygienists and their legal responsibility for the care they provide to clients, many dentists were seen to dominate hygienists in the work setting. Hygienists complained that they wanted more involvement in practice decisions and client care.

*Participant: I’d like to have a little more input and to make changes that are not easy again to change but I also feel part of a team, but you feel like an*
employee.... You might get a call up and say “We’re not going to be in the office tomorrow. Don’t bother coming in”. I work part time so you don’t get paid. So that kind of makes you really feel like an employee.... Every office is a little different. I don’t have any big complaints in my particular office but I wish things were better.

Researcher: Generally speaking, what do you think the working relationships are between dentists and hygienists?

Participant: Not very good.... From what I hear from other people. Why, I don’t know why? I guess it just depends on the dentist. His personality and how he looks at a dental hygienist. So it would vary in different offices. The relationship they have and whether he considers you an employee or whether he considers you part of the team. Some people can’t even order instruments when they want. They’ve got to use the same old instruments you know. (Participant 25, Private Practice Practitioner)

With respect to poor working relationships between dentists and hygienists, most participants indicated that dentists generally viewed hygienists as subordinate to themselves.

Essentially, dental hygiene practitioners argued that they did not, in many cases, utilize much of the knowledge and skills they had acquired during their education. The following quotation illustrates this position.

.... I always hear a lot of people saying “You know, I wished I could have done this for the patient but there wasn’t enough time or he’s asked me to bill out this many units of whatever” and you know, “I felt bad about not doing it”, and I think that.... There’s so much that you learn in school as far as comprehensive care and when, when you get out into the practice, a lot of the time it turns into how much, how many patients you can see in a day and you don’t get as much time to focus on the things that you might have liked to so you know, I’m lucky where I work because the time isn’t really as much of a factor. They - if I wanted six appointments, they’d let me have six appointments but in the majority of the practices I hear about from my friends and colleagues, they’re, they’re under the gun all the time. (Participant 38, Manager/Leader)

The above passage suggests that in many instances, the quality of dental hygiene care is sacrificed, under the direction of the dentist, in order to provide “basic care” to a greater number of patients.

Content analysis revealed that the documented beliefs of dental hygienists concerning dental hygiene practice were sometimes contrary to the perceptions of
participants in this study. For example, a report of the CDHA (1994c) which defines dental hygiene, describes dental hygienists as "primary oral health care professionals". This characterization implies that hygienists are able to assess the needs of clients and plan and deliver services independent of professional supervision. The content of this document was validated by Canadian dental hygienists through workshops and individual reviews. The report also stated "The dental hygienist ensures or promotes that the practice environment provides opportunities for the dental hygienists to participate in decision making" (p. 9), "determines what dental hygiene care will be provided during each dental hygiene appointment, ensuring that appointments are scheduled at intervals and for suitable duration" (p. 14), and "selects suitable equipment and resources" (p. 17). These statements contrast claims by participants of a great number of dental hygienists having minimal or no control over their practice environment, and few opportunities for decision making concerning client care. The observations of participants relate directly to the control of dental hygiene practice by dentists.

A CDHA publication on dental hygiene education standards, makes no direct mention of the working relationships between 'dentists' and 'hygienists', but instead refers to the "professional colleagues" of hygienists (CDHA, 1994d). Two other documents that were reviewed made reference to the "interdependent and collaborative" relationships between hygienists and dentists: the CDHA Code of Ethics (CDHA, 1992a) and a summary of dental hygiene self-regulation in British Columbia (College of Dental Hygienists of British Columbia, 1994). In contrast to these documents, the written regulations concerning dental hygiene practice in Nova Scotia state very clearly, that in the private dental office setting the dentist directly supervises the work of the hygienist, and the dentist is responsible for the quality of dental hygiene care that is delivered to the patient (Nova Scotia Provincial Dental Board, 1992). This document in a sense reinforces the claim of many participants that the relationship between the hygienist and the dentist is unidirectional and not collaborative in nature.
It is apparent that publications of the CDHA, the perceptions and experiences of participants, and at least one example of the regulation of dental hygienists in a province where the practice of dental hygiene is governed by dentistry, differ in standpoint concerning the working relationships between hygienists and dentists. Practicing dental hygienists assert that they are, for the most part, controlled by dentists in the workplace and object to these strict conditions of practice. A number of CDHA publications barely mention the association between hygienists and dentists; perhaps in an effort to encourage individual hygienists to alter existing controlling relationships while not acknowledging the fact that such relationships do exist in many situations. Or perhaps the CDHA, in its effort to raise the occupational status of dental hygiene in Canada, has chosen to have the content of its publications reflect the beliefs and values (not the realities) of an aspiring profession. Dental hygiene regulations in Nova Scotia state explicitly that dental hygienists must practice under the direct supervision of a dentist, which implies that hygienists are not accountable as individual hygienists for the services they provide. Based on the findings reported in this section, it appears that a conflict exists between dental hygienists' desire for greater autonomy in the workplace and the realities of practice as reported by participants.

**Isolation**

Many participants described dental hygiene practice as ‘isolating’. They explained that, for the most part, dental hygienists in private dental office settings work in isolation of other hygienists and other health professionals (excluding dentists and dental assistants). As a result of this isolation, dental hygienists may not have many opportunities to discuss matters with their colleagues pertaining to the practice of dental hygiene or professional issues of concern to them. In fact some hygienists, according to participants, may not even be aware of developments within their occupation unless they make a conscious effort to read related information published by provincial or national dental hygiene organizations or
attend dental hygiene conferences. This view was illustrated in the following passage from an interview with a diploma educator.

*I see one area that needs to be expanded is the, the perception of the individual out there. Once they leave school, they're working in a very isolated environment. They may or may not stay plugged in through a professional organization and that professional organization may or may not meet [their] needs in terms of continuing education and helping to ensure the hygienist has the network necessary to develop the confidence to take on self-responsibility for what they do.* (Participant 14, Diploma Educator)

This finding of 'isolation' in practice was noted previously in the section on the culture of dental hygiene. It appears that the work culture of dental hygiene, which is located predominantly in the private practice setting, does not provide many opportunities for hygienists to interact with other hygienists. In contrast to this finding, other health care settings such as the hospital or long-term care facility provide an environment where, for example, physicians and nurses communicate with their colleagues regularly. The isolation between individual dental hygienists in their everyday work lives may negatively affect the development of the dental hygiene occupation in terms of its cultural coherence. As a unified professional culture is viewed as a critical component of modern professions (Freidson, 1994; Macdonald, 1995), the isolation between members of the dental hygiene occupation may also hinder the professionalization of dental hygiene.

**Work Settings**

Participants cited some variations in dental hygiene practice across work settings. For example, generally, participants perceive that the 'tight control' over the work of hygienists in private dental practices does not exist to the same degree in the community health setting. This may be due to the fact that in this setting, in many jurisdictions within Canada, dental hygienists do not work under the direct supervision of dentists (Health & Welfare Canada, 1988). However, dentist involvement in this dental hygiene practice setting varies from region to region. For instance, in British Columbia under current regulations non-clinical community health hygienists can practice without a dentist having
examined the clients (College of Dental Hygienists of British Columbia, 1994). But in Ontario, a dental hygienist cannot provide services unless the services are ‘ordered’ first by a dentist. This observation provides another example of the way in which features of the dental hygiene occupation appear to be varied rather than consistent. In this instance, the variation relates to the way in which dental hygiene is practised in different work settings as well as to the regulation of hygienists themselves.

Generally, participants felt that community or public health work settings, in comparison to private practice settings, offer hygienists greater “freedom”, “more independence”, and a greater sense of “professionalism”. This was illustrated by the experiences of one degree educator.

... I think that is why public health would have even appealed to me more. One year I was in public health and the programming, and the assessment of statistical data, etc., that sort of appealed to me - that this was for more independent from anything you could do in the private practice setting and when you had to involve the norms and rules of the office... so that I think that public health was definitely more independent.... That you have complete control over the rein and you do your investigations and you do your planning, your organization, and your assessment and consequently you feel that you are functioning independently, in a professional manner. (Participant 6, Degree Educator)

This participant concluded that different dental hygiene work settings are equivalent to different “rules of work”, whereby hygienists have lesser or greater control over the services they provide.

Several participants also made reference to a few existing “independent” dental hygiene work settings in which practitioners operated without control by dentists or any other health professionals. They suggested that in addition to the absence of hygienist supervision, these work settings allowed the dental hygienist to utilize and hone their knowledge and skills, in comparison to traditional dental hygiene practice settings. A community health practitioner stated:

When I think of independent practice I think of dental hygienists being able to speak for themselves or to determine a client’s needs or you know make a diagnosis, make a determination and be able to state that, and make a recommendation and go forward with it without having to answer to or have it confirmed by someone else - you know- dentistry for instance.... The
way I see it right now, dental hygienists most often see something, assess it, come to a conclusion but are not given the legal or the professional authority to say that. It's usually "but check with the dentist"... and I think that for us to become sort of more independent and not have to rely on the approval of another professional... So that's what I mean by independent practice - having the authority and being recognized by the clients and other colleagues as when we make a determination, make a recommendation that nobody feels that it has to be seconded by another professional. (Participant 42, Community Health Practitioner)

It appears from the statement above that this participant perceives that the public and others associate the elements of independent practice (independent decision making, legal sanction over work) with the authority and credibility of professional persons. If this perception is fact, then the professional status of the majority of dental hygienists would be questionable at this point in time because of their deference to dentists.

In summary, participants had a common understanding of the practice of dental hygiene and the current knowledge base that underpins it, that is, clinical, basic, and social sciences. In their discussion of the delivery of dental hygiene services to the public, participants consistently reported that dentists, not hygienists, most often determined what services would be provided to clients. Moreover, it appears that conflict frequently occurs between the hygienist’s desired approach to dental hygiene care and the dentist’s perception of the dental hygiene practice model. Several participants suggested that the “traditional” dental hygiene practice model described above would not be appropriate for dental hygienists working in newer care settings such as multi-disciplinary clinics. Participants claimed that the degree of dentist control over dental hygienists varied with practice settings. For example, it appears that hygienists have greater autonomy from dentists in community health settings than they do in private dental practices. Participants were very candid in expressing their views of the “isolation” felt by many hygienists in private practice, meaning that there are few opportunities for hygienists to interact with their colleagues in the workplace. While participants openly described the sometimes undesirable “realities” of dental hygiene practice, dental hygiene publications portray a model of practice that is collaborative in nature, and reflects a systematic approach to care
based on the needs of clients. This apparent contradiction in the data gathered through participant interviews and through content analysis may have implications for dental hygiene professionalization, which will be discussed in the next chapter.

The findings in this section on the development and profile of dental hygiene have presented an historical context for the establishment and evolution of dental hygiene in Canada, an understanding of the primary features and characteristics of the culture and its members, and some insight into the professional aspirations of the dental hygiene occupation. Overall, the perceptions of participants were consistent regarding aspects of the occupation of dental hygiene and its individual members. For example, participants agreed that dental hygiene role models, such as program instructors, are the most significant influence over dental hygiene recruits as they learn the dental hygienist role. This finding is similar to the literature on professional socialization. Other examples include the characterization of hygienists as 'caring' individuals, the distinction made between the practice of dental hygiene and dentistry (prevention versus treatment), the values shared by hygienists (altruism, respect for others), and the important role of organized dental hygiene in the occupation's growth. However, the culture of dental hygiene was depicted as having a divided membership, that is, most hygienists view their work as a 'career' and some who view it as a 'job'. Careers were perceived to be aspired to by 'professionals' and jobs were held by 'non-professionals'. Although participants stated that dental hygienists see themselves as professionals, they question whether or not they belong to a 'profession'.

Participants also concurred that the impetus for the creation of dental hygiene in Canada came from dentistry, and that individual dentists and organized dentistry continue to influence the status and direction of dental hygiene. For instance, participants repeatedly made reference to the 'control' that dentists have over dental hygienists in the workplace and how this control can negatively impact the professional self-concepts of hygienists and
the practice of dental hygiene itself. Gender and power issues were cited as a major source of conflict between practicing hygienists and dentists.

The findings uncovered through the primary source of data collection, participant interviews, revealed few anomalies. However, some discrepancies were found between the perceptions of participants and the analysis of documents. A stark example of this was the discovery that participants' conceptualization of dental hygiene practice was very different from the beliefs and perspectives of practice documented in several publications of the Canadian Dental Hygienists Association. Whereas these publications present depictions of dental hygiene practice as interdependent in nature and client centered, participants' accounts of the realities of practice revolved around the domination of hygienists by dentists and the lack of control that hygienists have over the care they deliver to clients. Clearly, an important issue for dental hygienists and the occupation as a whole is the current relationship between dentistry and dental hygiene and its future impact on the status, development, and the professionalization of dental hygiene. This issue together with an examination of the professional project of dental hygiene and the role of dental hygiene education in this study of dental hygiene's culture will be presented in the following sections of this chapter.

**Major Theme: Relationships Between Dental Hygiene and Dentistry**

Generally, participants perceive that relationships between practicing dental hygienists and dentists are strained. Although the majority of participants themselves have positive working relationships with their dentist employers, they referred to their knowledge of many others who did not share the same collaborative associations. The effects of conflict in the day-to-day practices of hygienists and dentists has been referred to in the previous section *Development and Profile of Dental Hygiene*, with respect to changes in self-concept, employment conditions, and ethical dilemmas faced by dental hygienists.
In this section, these findings will be further illuminated through the narratives of the participants. The source(s) of increased tension between professional organizations in dental hygiene and dentistry was also discussed by numerous participants, and will be reported in this section. In particular, struggles with provincial licensing authorities and professional associations are presented. Additionally, this section will shed light on participants' perceptions of the way in which dentists' attitudes towards hygienists are fostered during their training.

Individual Level

Study findings suggest that the working relationships of hygienists and dentists vary and that they are both harmonious and antagonistic. Participants provided a range of examples that illustrate the ways in which individual dentists appear to disregard and undervalue the professional qualities of dental hygienists and the occupation itself. These varied from the language used by dentists, their manner of treatment of hygienists in the presence of clients and others, a lack of acknowledgement of dental hygienists' knowledge and skills, direct and authoritarian control over the services provided by hygienists, and even threatening behavior concerning employment when the professional beliefs, values, and actions of hygienists are in conflict with those of dentists. For example, one participant from Atlantic Canada stated:

*Individually I know there are offices where there's a wonderful meshing and a wonderful quality, but I still think that there's overall an inequality perceived by the dentists towards hygiene as a profession. I feel that it's "them and us", and that there is still a long way to go.... But then other times when I've spoken to hygienists, they say that they're unhappy, that there is a lack of communication in the dental office. And I think part of that is because they feel that they are under the "thumb of a dentist" and that they're stuck and that there's no meeting of the minds. (Participant 21, Community Health Practitioner)*

The experience of this participant appears to support the existence of both positive and negative relationships.
As discussed previously in this chapter, gender related issues are significant in the relationships between hygienists and dentists. However, as the number of women in dentistry increases the nature of these gender issues might alter. Only one participant made reference to the nature of relationships between female dentists and female hygienists. She suggested that gender issues are not altered significantly when female hygienists are employed by female dentists.

*Women dentists... they are hard on each other but they can be very hard on women.... I have experienced this with the odd dentist, so I know what it’s like. They get very threatened by a hygienist. Certainly, they do not consider the hygienists as equal.... Different, but not equal. (Participant 2, Community Health Practitioner)*

This quotation implies that there is no difference in the interpersonal behaviors of female versus male dentists in their treatment of hygienists. Perhaps, the culture of dental school is such that all students, male and female, are socialized in the same manner with respect to the expectations of their working relationships with dental hygienists.

Several participants, who had been educated in dental hygiene programs that were affiliated with dental schools, commented on their perceptions of the impact that training has on the development of dental students’ attitudes towards dental hygiene students. They suggested that dental educators deliberately structure the learning environment so that dental students are instructed in the subordinate role of dental hygienists. without understanding the parameters of dental hygiene practice. Sometimes, students are physically separated from one another. Institutionally, dental hygiene programs typically do not have access to the same level of resources as dental programs. This also teaches dental students that dental hygienists are not valued in the same way that they are. In the minds of participants, dental students are taught to develop elitist attitudes and this type of self-image carries over into the work world, where hygienists are treated as “auxiliaries” by dentists.

A diploma educator from Ontario, made reference to the control of dentists over dental hygienists in the work setting and the potential for job loss if hygienists disagree with dentists. She stated:
You want to get paid. You go along with the policies prescribed by the employer who in this case is the dentist. Aside from the employer/employee aspect which is a financial control there is the legalistic regulatory supervision type thing. Hygienists still see themselves working under the supervision of a dentist and having to carry out whatever they say, whether they agree with it or not. So, there is economic power. (Participant 14, Diploma Educator)

This statement was reinforced by a dental hygiene clinician from Atlantic Canada. According to her, being involved in activities directed at making the public more aware of the dental hygiene occupation carries employment risks.

*I think we have to get out to the public again a little more and promote ourselves.... Well, here on ... you start at something like that and you might not have your job tomorrow because everybody knows everybody else and it's such a .... There's not all that many dentists here and there's not a lot of hygienists here and your job is always on the line whenever that comes up.* (Participant 25, Private Practice Practitioner)

A dental hygiene private practitioner from Alberta also described a similar situation to the one quoted directly above. She stated that members of the Alberta Dental Hygienists Association who support changes in legislation that would permit independent dental hygiene practice in Alberta, and who are also employed by dentist practitioners, are sometimes threatened by their employers with job loss. This participant also indicated that for this reason, many hygienists will not become involved in dental hygiene's professionalization efforts in that province. Several other participants from Alberta suggested that relationships were more strained at the organizational level than at the individual level, especially with dentistry's opposition to dental hygiene self-regulation in 1996.

Other informants claimed that despite an abundance of acrimonious relationships between many dental hygienists and dentists, there were situations in which genuine collaborative relationships prevail. In these instances, hygienists feel valued by dentists and more colleague type relationships are the norm. Hygienists have greater latitude in the provision of dental hygiene care to clients and decision-making opportunities with less direct interference and direction from dentists. However, some participants were critical of dental hygienists that they knew, who either accepted a subordinate role to the dentist in the
dental office, or preferred to be ‘dependent’ on the dentist for directing their work. Generally, informants identified a need for all hygienists to 'stand their ground' in their working relationships with dentists, especially when their practice and professional values and ethics may be compromised by such relationships. One dental hygiene leader stated:

*I think practitioners, and my remarks are sort of geared to self regulation, and even if you are not in an area where self regulation occurs, but I think you have to be accountable for the service you provide. I think you make the decisions with the client... through maybe informed consent but that if you don't agree with something that the dentist is suggesting.... If you are told to polish, for example, polish the teeth and there is no criteria or rationale for doing it other than maybe an economic one, you do not. You stand up for that. You support that. You question it. (Participant 15, Manager/Leader)*

Frequently, dental hygienists in practice are confronted simultaneously with professional and practical issues. As noted in the passages above, when hygienists call into question the practice decisions or directives of dentist employers, they may be at risk of retribution.

Generally, the perceptions of participants suggest that the relationships between individual dental hygiene and dental practitioners in private practice are not consistent. In many circumstances, they are seen to be positive in nature. This ranges from hygienists participating in decision making concerning the provision of clinical services to clients, to having the freedom to unilaterally direct dental hygiene care for clients. However, numerous participants were critical of dominating, controlling, and disrespectful behaviors of dentists towards hygienists. These practitioners are made to feel that they do not possess adequate knowledge and skills to independently assess the dental hygiene needs of clients and to deliver appropriate services.

Many participants suggested that the primary reason that dentists continue to "control" the work of hygienists is "economics". They perceive that some dentists prescribe the number of patients that a hygienist may treat in a day, as well as the length of each appointment, based on income potential. In actual fact, such dentist practices are legitimated through the provisions of regulations that legally sanction the dentist as the ultimate authority in the delivery of dental services in many jurisdictions. Dentists are
granted powers by the state that permit them to delegate and dictate the way in which dental hygiene care is delivered by hygienists, if they choose to exercise these powers. They often rationalize the strict supervision of dental hygienists’ work by claiming that such an action is in “the best interests of the patient”. State endorsement of dentist powers over dental services and the providers of these services reinforces dentistry’s dominant position over the dental hygiene occupation and its members.

Some participants reported that relationships between hygienists and dentists in community health settings, compared to private dental offices, are generally more positive. This may be due to the fact that in these settings, hygienists are not normally supervised directly by dentists in their work. Also, the provision of dental hygiene services in this setting is not usually associated with a fee-for-service, as they are in private dental offices. Hence, economic factors may not play a role in hygienist-dentist interactions. Generally, participants view the roles of hygienists and dentists as complementary and critical to comprehensive client care, but they believe that relationships must improve as hygienists are becoming increasingly dissatisfied with the status quo. However, it is unclear whether or not this dissatisfaction may lead to a change in current structural relationships in the private dental office setting.

**Organized Level**

All participants reported that the relationships between provincial dental hygiene and dental professional associations and national associations were, for the most part, adversarial. Additionally, in provinces where dental hygiene is self-regulating and governed by a dental hygiene authority instead of a dental board, relationships between dentist and dental hygienist regulatory agencies are also tense. Many of the perceptions of participants are based on their experiences and involvement in the organizations mentioned above. Generally, informants believe that poor organizational relationships are a direct result of two factors: dental hygiene initiatives in various provinces aimed at achieving self-
governance and the pursuit of changes in legislation that would permit dental hygienists to operate practices independent of dentists. The latter would alter traditional relationships between hygienists and dentists substantially. Document analysis supported the views of participants as illustrated by the following passage.

Sociological issues such as gender, equity and power relationships have always affected our profession, and will continue to do so for some time. There is no question that many of the tensions which exist between dental hygiene and organized dentistry are rooted in such issues. Sociologists tell us that the basic reason for these tensions is one which exists between many groups: all institutions resist change, and power is never given up willingly. In many provinces, self-regulation for dental hygiene has been (and in some provinces still is) resisted by dental groups because it represents a loss of power (Forgay. 1995c, p. 197)

Participants perceive that dentistry as an organization, and individual dentists, feel threatened by these changes for several reasons. First, dentistry’s legalistic monopoly over the provision of all dental services in the marketplace may be challenged. Second, their privileged social position in society as the expert authority in all aspects of oral care may be tested, although the establishment of independent denturist practice has not seemingly affected dentistry’s authority. Third, dentistry’s control of the educational preparation of dental hygienists, the scope of dental hygiene practice, requirements for entry into the occupation, and dental hygienists’ position in the dental division of labor (currently controlled by dentistry) might be disputed.

Overall, participants felt that provincial dental organizations have influence over dental hygiene organizations. A key informant from Atlantic Canada stated “... the dental association certainly has power over hygienists in the province.... We don’t have autonomy.... Everything goes through the Association, we have to speak to them first. We
are still under the ‘thumb’ of the dental association” (Participant 21, Community Health Practitioner). This participant implied that organized dentistry acted as a “clearinghouse” for anything that did or didn’t change for dental hygiene in the province. In British Columbia, Alberta, and Ontario, where dental hygiene is self-regulating, participants repeated the same message. They claimed that dental organizations attempt to control the dental hygiene occupation by erecting barriers to prevent its development and expansion. For example, a participant spoke about the Alberta Dental Association forming an alliance with the Alberta Dental Assistants Association to develop a “scaling and root planing” module for dental assistant training. Scaling is a primary component of dental hygiene practice. She stated “... there seems to be new ways of trying to control hygiene practitioners. If the Alberta Dental Association can’t get what they want with dental hygienists, they will just work to eliminate them” (Participant 29, Diploma Educator). Some of the participants felt that this action taken by the Alberta Dental Association was an opposing and “threatening” reaction to the establishment of dental hygiene self-regulation in the province.

Almost identical observations were made by participants in British Columbia with respect to a movement on the part of organized dentistry to expand the role of the dental assistant to encompass the work of hygienists. Again, the rationale for these efforts appears to be connected to dentistry’s anxiety about dental hygiene self-regulation. Participants suggested that this concern is related to economic and control issues. That is, dentists question whether or not dental hygiene self-regulation may threaten their professional monopoly over the provision of oral health services, or their exclusive rights and powers under legislation to define and control oral health services and the providers of those services. Generally, informants claimed that the relationship between the professions of dental hygiene and dentistry in British Columbia has deteriorated. One participant articulated this in the following quotation.

Self-regulation has really polarized the two. Dental hygiene and dentistry, I don’t think have ever been further apart in this province.... I do worry
about dental hygiene and organized dentistry or political dentistry and what they're up to. I mean, I wouldn't put it past them that there is a national effort going on to collectively undermine dental hygiene in this country.... You know I just see little bits happening here in B.C., and then I hear little bits happening in Ontario and I think CDA, you know the Canadian Dental Association may be working to undermine us and replace us in their practices.... I see them adding duties here in B.C. for the Certified Dental Assistants and... I mean we're probably this close to them adding scaling in somehow. I mean I see the changes they make and they couch them in general terms and I think they're just setting it up so it can be interpreted in a way that would allow that.... They want control of who's delivering the care. (Participant 37, Degree Educator)

The educator quoted above suggested that the national professional association of dentistry in Canada (CDA) may be encouraging provincial dental bodies to decrease the scope of dental hygiene practice (a form of de-skilling) in an attempt to neutralize the self-regulating powers of dental hygiene.

Participants residing in Atlantic Canada, where dental hygiene is not self-regulating, reinforced the perceptions of participants in self-regulating provinces. They stated that even in the absence of self-regulation, organized dentistry appeared determined to exert continuous authority and control over the dental hygiene occupation. Several informants asserted that representatives of dental organizations in the Atlantic Canada region were promoting the idea of extending dental assisting practice, thereby substituting dental assistants for dental hygienists at a much lower cost to dentist employers. Although dental hygiene associations in Atlantic Canada have expressed an interest in pursuing legislative changes to the regulation of dental hygienists, they haven't actively engaged in this process. Some participants claimed that leaders in dental hygiene were "worn out" by dentistry's efforts to curtail or halt their activities towards self-governance. In the words of one informant:

There haven't been a lot of struggles because we haven't tried to struggle. I think because we have a defeatist attitude and we think "what's the point". I know we talked about self-regulation years ago and started going at it and then realized the opposition we had, and everybody feared that. And we stepped back and it was kind of slowly dropped. (Participant 25, Private Practice Practitioner)
Participants perceived that organized dentistry in Atlantic Canada would continue to wage its battle against all efforts by dental hygiene organizations to acquire greater autonomy from dentistry, in the form of self-regulation, changes in supervision requirements, or independent practice. Generally, participants across all provinces stated that dental organizations are strengthened by their political lobbies, strong connections to government, and human and financial resources. Conversely, dental hygiene organizations were seen to lack political clout, although participants admitted that organized dental hygiene has turned to the political process as a means of facilitating its goal of self-regulation.

Relationships between individual dental hygienists and dentists range from collaborative and productive in dental practice settings to adversarial. Participants in this study generally experienced positive relationships with dentists with whom they worked. However, hygienists communicated the fact that many of their colleagues had poor working relationships. The nature of these adversarial relationships relate primarily to disrespect, controlling behaviors over the practice of hygienists, gender issues, a failure to acknowledge the skills and knowledge of hygienists, and disagreement about treatment decisions. At the organized level, relationships are increasingly tense. The establishment of dental hygiene self-governance for more than 80% of the dental hygiene population has caused dentistry to be concerned about issues such as reduced supervision requirements for hygienists and the potential for independent practice in provinces where legislation would permit. Still, many participants claim that independent practice is not of interest to the majority of hygienists. It seems that dental hygiene's continued efforts to alter the control of dentists over their activities in the workplace, and their efforts at acquiring greater power over the professional development of dental hygiene itself will be hampered by current relationships. The next section outlines the elements of dental hygiene's professional project including participants' perceptions of a profession, the goals of professionalization, factors related to the achievement of professional status, and barriers.
Dimensions of the Professional Project of Dental Hygiene

The professional project begins with the formation of an occupational group whose goal is to advance the position of the group (Macdonald, 1995). The pursuit of a project, as viewed from the symbolic interactionist tradition, is similar to the notion of career. The elite or leaders within a group define its objectives and then develop an action plan designed to achieve the objectives. Although individual members may not be 'active' in the project, they usually are sufficiently aware of the project goals (Freidson, 1970; Larson, 1977). Occupations aspiring to be professions are concerned with a monopoly over the services they provide, social status, establishing a distinct jurisdiction, exclusive control over professional knowledge as well as control (selection of entrants, training, socialization, requirements for practice) over those who provide the services (Larson, 1977; Abbott, 1988). Generally, participants supported the efforts of the dental hygiene occupation to increase its professional status and referred to these efforts as the "professionalization of dental hygiene". This section begins with a discussion of participants' notion of a profession and their perceptions of the occupational status of dental hygiene, followed by a description of the elements of the professional project of dental hygiene.

Perceptions of Profession and a Professional

Participant interviews revealed that dental hygienists appear to have a varied notion of the meaning of profession, and a more consistent view of the professional person. Several participants drew a distinction between 'traditional' and 'modern-day' professions, referring most often to dental hygiene as an occupation that resembled a contemporary profession. As noted earlier in this chapter, the participants were confident in describing themselves and their colleagues as 'professionals' but were not as certain about their own status as a member of a professional group, such as that of dentistry or medicine.
In the view of the participants the meaning of profession ranged from a selection of attributes ascribed to an occupational group (educated members, valued service, code of ethics, practice standards, peer review, self-governance, a national professional association, and a research base) to a sense of great respect that society confers on a group of people. Presumably, without this societal recognition and trust, an occupation would not be viewed as a profession. The identification of a profession is seen to be in the "eye of the beholder". One participant stated:

... to me personally that professional status is a mark of respect that society confers on you. You can move towards that by doing certain things. You can as an occupational group, become self-regulating, develop a code of ethics, develop standards of practice, educational standards, licensure - ongoing licensure requirements in terms of things like continuing education so that you know, quality assurance mechanisms are built into the kinds of services that you provide. See, there are those kind of things that you traditionally think of as moving towards a professional state but ultimately I think that it really is the reflection that society places on you. (Participant 22, Diploma Educator)

Generally, participants didn't specify how professions achieve the respect of society, either in the presence or absence of traits such as abstract knowledge or professional ethics.

Another recurring idea expressed by the participants was that their view of modern professions didn't necessarily imply a pure and dedicated knowledge base, but one that integrated theories from several discipline areas. Some referred to this as "applied knowledge". Participants repeatedly expressed the need for dental hygiene to conduct research and develop theory that validates all aspects of clinical practice. One educator compared the importance of expert knowledge relative to independent practice in the professional project of dental hygiene.

... if you look at a comparable situation for example, the denturists who have been practicing independently since the early 60's, I think that it would be interesting to know what the public thinks but I never hear them referred to as a profession. They provide a very useful service and for the most part, they are still 2-year trained people.... So simply by becoming independent and being able to practice independently, I don't think that will confer, in and of itself, a professional status. I think what we must continue to move towards is the development of our knowledge base and the validation or at least the testing of all that we say are in fact dental hygiene services or interventions. We need to be able to test them and say what a hygienist does makes a difference. (Participant 22, Diploma Educator)
Based on this participant’s perceptions, professional status is not derived from occupational claims of valuable public service or public demand for services (as in the case of the denturists), but from research and knowledge that demonstrates the efficacy of specialized services.

A few participants offered additional insight into the evolution of modern versus established professions. When they spoke about the impetus for traditional professionalization they related it to phenomena such as the “time in history, natural evolution, and the “test of time”. With respect to younger professions, they placed the emphasis on the “value of the work” that was offered. This insight is illuminated by the following statement.

... going back to the days of forever, where the medical practitioner might be the only person who had any education in the community.... They became the leader of the community... the pillar of the community.... They became everything to the community so a lot of it is evolutionary and has absolutely nothing to do with the type or the amount of training or education that they had but it became a cultural facet.... So it's more a function of time than anything in that particular scenario. Now you might debate there is other new professions that are perhaps even younger than hygiene but have a more professional status and I think that would be more closely related to flash and excitement and entertainment.... I mean if you have a certain value that is extremely unique to the community, you are automatically elevated to that status whether or not you fit the other criteria of professionalism. (Participant 24, Manager/Leader)

One participant referred to modern-day professions as being both altruistic and motivated by “business type” interests, namely, income generation. Several hygienists also suggested that emergent or aspiring professions that are female dominated such as dental hygiene do not seem to fit the classic definitions of professions. Moreover, they view modern professionals as having multiple roles outside of the expert practitioner role, such as, researcher, educator, or client advocate. These participants claim that members of dental hygiene are beginning to develop multiple professional roles.

Participants stated that ‘autonomy from others’ was a critical factor in the development of a profession. However, most participants stated that in the case of dental hygiene’s development as a profession, independent practice should be an ‘option’ for
hygienists, but was not essential to its professionalism. There were several hygienists, though, who argued that 'control over dental hygiene work' independent of dentists was critical to the professionalization of the dental hygiene occupation. Participants who expressed this view reside in both provinces where dental hygiene is self-regulating and where it is not. This suggests that their conception of a profession and dental hygiene's own status extended beyond their provincial experience in dental hygiene. Support for independent dental hygiene practice was illustrated in the following excerpt from an interview with a practitioner.

Researcher: Do you think independent practice would lead to professionalization?

Participant: Yeah. Again because you'll be out with your shingle saying "dental hygienist - we're allowed to work by ourselves". We are a profession that can treat clients and can treat them by ourselves without someone looking over our shoulder. (Participant 20, Private Practice Practitioner).

Study informants expressed greater clarity in their perceptions of the meaning of a professional person. Again, participants stated that first and foremost a professional is an individual who makes their own decisions about the services they provide and takes responsibility for, and is held accountable for, these decisions. Professionals are perceived to be 'career oriented' versus 'job oriented', implying a greater degree of dedication and commitment to work. Earlier in this chapter in a discussion of self-concept and image participants reported that many dental hygienists view themselves as 'professionals'. At the same time, they spoke passionately about the fact that in many dental offices hygienists do not have control over the care they provide to clients. This fact interferes with hygienists' desire to provide their clients with complete 'professional' care. Perhaps, then, hygienists' professional self-image comes from behaviors other than independent decision making.

Repeatedly, hygienists referred to a professional as having an "inherent sense" of being a professional person. Professionalism is an intrinsically held personal value that is communicated through an individual's skill set, her interactions with the public, and her
care of clients. It would appear that this intrinsic value is related to one's self-concept about the professional's role.

*I relate it very much to self esteem in a person. If you have very low self-esteem, the only person that can change that is yourself. If a body lacks a professional image the only thing that can change it is that body itself. So they have to internalize what they want to have for a professional image and then work towards it and make sure that everyone else understands what it is they are and what they are trying to do.* (Participant 24, Manager/Leader)

Several participants stated that in their view a professional must engage in an extended formal education period and a socialization process in order to achieve a 'professional' level of knowledge, behaviors, and skills. Others described a professional as one who participates in life-long learning, remains current in their field, and shows concerns for clients. The modern-day professional may participate as a member of a multi-disciplinary team of professionals. Participants did not present a unified view of a profession. Some claimed that professions must control their own work independent of other professionals. Others suggested that, in the case of dental hygiene, professional status could be achieved under the current hierarchical structure of the dental office setting, provided that hygienists could make independent decisions about client care.

The perceptions of participants revealed that members of the dental hygiene occupation believe that dental hygiene is an "emerging" profession. The status of dental hygiene is viewed as "in transition". Many participants indicated that recent changes in legislation in several jurisdictions in Canada concerning the regulation of dental hygienists is the catalyst for the ongoing redefinition of the occupation. Others anticipate that the achievement of dental hygiene self-regulation in all jurisdictions is the end point for changes to dental hygiene’s status. However, self-regulation does not necessarily result in the legal right of practitioners to provide services directly to the public or exclusive claim to an occupational jurisdiction. Instead, this is a negotiated process between the state, a professional group, and others who may have a related or vested interest in this process (Macdonald, 1995). For example, requirements for changing dental hygiene’s scope of practice in a particular jurisdiction may involve negotiations between representatives of the
dental hygiene and dental communities. In this instance, conflict would likely occur between dentistry and dental hygiene as dentistry would assert its power to sustain its exclusive monopoly over the provision of dental services in the marketplace.

Goals

The participants expressed the view that the collective action of organized dental hygiene, as well as the actions of individual hygienists, are necessary to support the goals of dental hygiene’s professional project. The perceptions amongst participants concerning these goals were less cohesive than documented statements of the Canadian Dental Hygienists Association. For the most part, informants were unable to articulate the exact means by which each of these goals would be achieved. Several hygienists stated that they were aware that the dental hygiene occupation was moving forward, but that they were really uncertain about its direction or its vision.

Many participants, irrespective of different work settings or residence, identified one goal as dental hygiene’s need to “break away from dentistry” and achieve “greater autonomy”. One participant espoused that the politicization of dental hygiene and its pursuit of self-regulation is driven by the dominance of dentistry and gender issues. Essentially, she stated that the current relationship must change. On this point, participants spoke again about independent dental hygiene practice on the one hand, and improved employer/employee relationships, on the other hand. Several participants suggested that advanced education would be needed to prepare independent practitioners for work in non-traditional settings, such as health care facilities for seniors. Some, but not all, proposed this education would take the form of a degree program. This position was supported by an earlier finding that suggested that the current diploma model in dental hygiene education does not adequately address the preparation of hygienists for work in community settings. A second goal defined by hygienists is to establish parameters of dental hygiene practice that are consistent across provincial jurisdictions. In other words, dental hygiene services
would be understood by the public to be a particular set of skills, similar to the public’s awareness of the physician’s or the dentist’s role. This goal would seem to support a solution to previously identified issues of dental hygiene’s poor public image and lack of distinction from other oral health care providers such as dental assistants.

As noted earlier in Chapter Four, participants envision an expansion of the work settings of hygienists, for example, in institutions, short-term and long-term care facilities, and in home care. A third goal, that of persuading government to alter regulations concerning dental hygiene practice, would result in the elimination of restrictive supervision requirements for hygienists. This would allow hygienists to provide care directly to clients in these settings without dentist supervision. Hygienists perceive that the unmet oral hygiene needs of these clients would be well served by their services. Although one might question whether or not this goal may be related to the creation of an “occupational niche” for dental hygienists, no participant made reference to this. A related goal addressed by most of the participants is the attainment of dental hygiene self-governance in all provinces. Some informants suggested that this accomplishment would “bolster” dental hygiene’s confidence to pursue some of the previously stated goals.

A fourth goal of dental hygiene’s professional project is to give direction to research in dental hygiene. Although participants repeatedly stated that in their view professional status can be achieved on the basis of “borrowed knowledge” from other disciplines, they assert that dental hygienists must enhance the current research base to support future developments in clinical practice. This means creating a larger pool of dental hygiene researchers who are able to conduct research that is underpinned by the perspectives and experiences of hygienists, rather than in those of dental researchers. Several participants suggested that the development of dental hygiene research and theory may lead to new dimensions of practice that would clearly distinguish dental hygiene practice from dental practice. This view is somewhat contrary to an earlier discussion in this chapter where many participants stated that dental hygienists at present have a distinct role from dentists.
This finding further supports the notion that members of the dental hygiene occupation are divided in their understanding and experiences concerning the present state of dental hygiene.

The Canadian Dental Hygienists Association has articulated all of the goals identified above and others in a number of their current publications (CDHA, 1992c, 1994d, 1995b, 1999a). The goals of the national professional association of dental hygiene that relate to the professional project include: facilitating direct access by the public to dental hygiene services as one choice for consumers, serving as the official authority on all matters pertaining to dental hygiene and dental hygienists, advancing dental hygiene education and research by supporting the establishment of degree programs in dental hygiene, addressing population-wide oral health issues, and developing relationships with government, industry, health providers and the public (CDHA, 1999a). It is interesting to note that CDHA’s mission and vision statement (1995a, 1999a) makes no direct mention of dental hygiene’s relationship with dentistry, but the content of this statement implies that this relationship is “interdependent” in nature, similar to proposed relationships with other health professions. The stated goals of this dental hygiene organization appear to ignore the present domination and control of dentists over hygienists and the strong influence of dentistry over the dental hygiene occupation. Despite well written passages that outline the work and activities of CDHA in the “project”, CDHA documents do not appear to communicate a cohesive organizational definition or position on matters related to the professional project such as occupational monopoly, exclusivity, ideology, expertise, and knowledge.

In the next section, findings are presented related to the perceived importance of the contributions by individual hygienists and organized dental hygiene in promoting public awareness of the nature of the oral health services provided by dental hygienists.
Making Dental Hygiene Known

According to the perceptions of the participants, the idea of "making dental hygiene known" to the public at large, to government, and to individual consumers and other health professions is paramount to raising society's awareness of hygienists and their work. As noted previously in Chapter Four, participants believe that a sizable portion of the public is not aware that dental hygienists exist. Additionally, they claim that even consumers of dental hygiene services are often uncertain of the differences between hygienists and other dental practitioners except for the dentist. The dental office is seen as the 'property of the dentist', who sits in control of all services rendered and the providers of those services. Presumably greater public awareness will lead to wider recognition of dental hygiene and the value of its work. In addition to marketing awareness campaigns created by dental hygiene organizations (CDHA, 1995a), participants suggested that individual hygienists should seize every available opportunity to discuss and promote the role of dental hygiene in health care. All participants cited examples of their own involvement in this activity, some of which occurred within a professional environment like CDHA, and at other times in their personal lives. Document analysis revealed that organized dental hygiene encourages and supports this individual strategy for making dental hygiene known. A CDHA President states:

One of the goals identified by the CDHA Board of Directors is to raise the profile of dental hygienists within the community as a whole. Dental hygienists by the very nature of their personality types tend to be good participants on committees, community boards, school boards, and the like. Depending on your personal time commitments and family responsibilities a resolution for the new year might entail the joining of a complementary organization. One where you can show off your talents and
let the world know just who dental hygienists are! (Richardson, 1993c, p. 199)

Personally related activities ranged from volunteer committee work on local health boards, involvement in community ‘parent councils’, volunteer work on political campaigns, and casual conversation at social gatherings. One participant stated:

*I always try, it doesn’t matter what type of situation I’m in, if it’s a social situation or a sports situation, that if it does come up about dental hygienists that I really try to impart what a dental hygienist is as opposed to “just a person that scrapes your teeth”, and I really hope that if a comment comes up that I always do my best to really let them know.... I really try to project a professional image that we’re more than “just a tooth scraper” and that I would hope that whatever I’m doing is reflective of the profession because I don’t consciously go out all the time and say “Today I’m going to go do this”. I just hope that through my actions and what I speak of, that it does it. But I always take the opportunity to put plugs in for the profession whenever I can. (Participant 32, Manager/Leader)

Several participants indicated that they sometimes acquired new skills, for example, organizational, interpersonal, or leadership skills through their volunteer activities. They were then able to apply these skills in their work with dental hygiene organizations to “make dental hygiene known” or in activities that were designed to promote change for dental hygiene, such as presentations to government. A community health practitioner stated that she found it valuable to sit on a health board comprised of many health professionals, where she was able to promote dental hygiene and distinguish it from other dental professions such as dentistry, or she was able to influence policy development on health matters. Other committee members then observed the contributions of a dental hygienist to this policy making process. The assumption here is that committee members’ awareness of dental hygiene was raised as a result of one hygienist’s efforts.

Key informants (manager/leader, community health practitioners, and educators) in particular stressed the need for all hygienists to take part, at some level, in the business of “making dental hygiene known” and in the representation of its professional image. For example, they suggest dental hygiene practitioners should inform their clients about the
education of hygienists and the occupation itself during the time they’re providing care, or that they should display their diploma on the wall of their operatory. These participants, who are active leaders and visionaries in the dental hygiene community, and who expressed an intense interest in dental hygiene’s professionalization, also emphasized the importance of self-regulation and the establishment of independent dental hygiene practices as ‘symbols’ of a profession in the public’s perception. In addition to raising the profile of dental hygiene, participants discussed their perceptions of the advancement of the professional project of dental hygiene relative to several other factors. These findings are documented in the next section.

Enabling Factors/Opportunities/Players:

During interviews, participants were asked what the occupation of dental hygiene has to do in order to achieve its professional goals, and who has been involved in its professionalization or professional project. Responses to this question suggested three categories: enabling factors, opportunities, and players. Often these categories overlap. The category of ‘enabling factors’ incorporates the perceptions of the participants relative to those factors that stimulate, facilitate, and contribute to the professional project. Essentially these are dental hygiene self-governance in all jurisdictions, the development of dental hygiene theory, changes in dental hygiene education, and public demand for dental hygiene services. As self-regulation and dental hygiene theory have been described earlier in this section, the following discussion will relate to dental hygiene education and public demand for services.

In terms of the educational preparation of dental hygienists, participants perceive that more curriculum time should be dedicated to professional socialization and the changing nature of dental hygiene. Students should be well grounded and well versed in their professional responsibilities and rights. They must learn to function appropriately outside of traditional dental office settings. Several (non-educator) participants suggested
that students have to be taught “to stand up for themselves” when they are confronted by professional, ethical, and personal issues in practice. Others extended this idea by suggesting that as dental hygienists become more educated (through degree programs), this will ‘enable’ them to be less accepting of combative relationships with dentists, especially when these relationships challenge their professional values. In this sense, educators become ‘players’ in the professional project. They are charged with the responsibility of preparing students for their professional lives. A few participants anticipate that dental hygiene degree programs will continue to attract “better prepared recruits”. As might be expected, diploma and degree educators and managers/leaders in this study support advanced education for dental hygienists, that is, baccalaureate level programs. Although an advanced and extended education is traditionally seen to embody the professional spirit, not all of the participants in this study view diploma education in dental hygiene as an impediment to professionalization.

Many of the participants, in addition to the Canadian Dental Hygienists Association (CDHA, 1992c, 1995b, 1999a), believe that public demand for dental hygiene services will increase the value of these services and hence the status of the practitioners who provide them. In reference to the category “Making Dental Hygiene Known”, participants perceive that an increased public awareness of dental hygiene services will lead to public demand for the preventive and therapeutic care that hygienists provide. Public demand will ‘enable’ dental hygiene to move forward with the support of the clients they serve. Participants expressed several ideas about the potential impetus for public demand. First, community health practitioners and managers/leaders referred to new provincial health care initiatives that place less emphasis on institutional-based care and greater importance on community-based multi-disciplinary health care. In this scenario, participants identified an ‘opportunity’ for members of the dental hygiene occupation to ‘lobby’ governments to consider state support for the provision of cost-effective preventive oral health services delivered by hygienists in community settings (Manga & Campbell, 1994). This example
demonstrates the potential for dental hygiene to create a public demand for its services and an opportunity for advancing the professional project.

A second example cited by participants involves the potential for an increase in direct public access to dental hygiene care in the private sector. Although only a few independent dental hygiene practices exist in British Columbia, participants postulate that if these practices are successful over time, public demand for these practices may be stimulated in other jurisdictions. The advantage for members of the public is a reduced cost for preventive and clinical oral hygiene care because the requirement for dentist supervision and related costs would be removed. The literature on health care economics refers to this type of care model as “health human resources substitution” (Fulton, 1988; Blishen, 1991; Manga & Campbell, 1994). Again, despite the fact that many participants do not envision independent practice as a highly critical factor in dental hygiene’s project, they do acknowledge that it will raise the profile of dental hygienists as health care providers.

Under the category of ‘players’ in the advancement of dental hygiene’s project, participants referred to the Canadian Dental Hygienists Association and other dental hygiene organizations, government, and individual dental hygienists. Participants identified the role of professional dental hygiene organizations such as CDHA as being one of leadership, vision, and “community”. A responsibility of these organizations, in the view of participants, is to provide the structure and the incentive to bring members of the occupation together to share ideas, to develop and reinforce the “culture” of dental hygiene, to “mobilize” the membership in the occupation’s growth, and to be the collective “voice” of dental hygienists. While acknowledging the important role of dental hygiene leaders in articulating the professional project, participants identified the role of individual hygienists in “shaping” the “professionalism” of dental hygiene by their attitudes and behaviors in the workplace and in the community. This view is illustrated in the following excerpt:

*Researcher:* _In your opinion, will dental hygiene self-regulation result in professionalization?_
Participant: Not unless hygienists themselves make the effort to make a commitment to professionalization. Self-regulation in and of itself won’t do it for them. There are a lot of self-regulated groups out there that aren’t really that terribly professional.... We get back to this definition of who and what we are. Communicating the definition... translating that definition into a delivery of skills, care in the environment, care to the client. (Participant 24, Manager/Leader)

While individual hygienists are viewed as critical ‘players’ in dental hygiene professionalization, participants also expressed concern about the impact of those individuals in the dental hygiene community who either do not appear to have an interest in the professional project, or who view themselves as technicians rather than as professionals.

A final player in the professional project is government. Participants stated that government recognition and support are crucial to dental hygiene’s professional development. Ultimately, the state must decide whether or not particular occupations will be granted rights, privileges, and powers to conduct themselves as professions (Macdonald, 1995). Based on the perceptions of participants, dental hygiene must seek the right ‘opportunity' to utilize the political process in order to lobby government on their behalf.

I think we need to know how governments operate so that we can be more effective in our government relations. When we go to talk to government, we need to know how they are driven, where their decision points are and the way in which you bring about change. (Participant 15, Manager/Leader)

This participant, and others, pointed to the fact that dental hygienists are not accustomed to utilizing the political process and must learn to do so in order to be effective in their lobbying efforts.

While participants described strategies for the progression of dental hygiene’s professional project, they did not hesitate to discuss their perceptions of the barriers to this project. These findings are reported in the next and final category in this section.
Barriers

Three recurring patterns emerged from the interview data in participants' discussion of barriers to the professional project of dental hygiene: dental hygienists themselves, organized dentistry as well as individual dentists, and gender issues hamper professionalization efforts. Gender issues are interrelated with the other patterns. Generally, participants were reflective and straightforward in their depictions of dental hygienists and the occupation. In spite of the fact that in their candor, they found themselves being critical of some of the practices and behaviors of their colleagues, they spoke openly about their personal views. Although participants were, by and large, quite condemning of some aspects of dentistry and the behaviors of dentists themselves, they were equally sensitive to the actions of dental hygiene and hygienists.

Participants perceive that there is a sub-culture within dental hygiene, comprised mostly of private practice practitioners, that has a negative influence on the professionalization of the occupation. Individuals within this sub-group are described by some of the informants as: having a poor professional self-concept, being apathetic about the value of their work, choosing to be dependent on (male) dentists for clinical decisions that they are educated to make, and failing to uphold their professional values in the face of adversity and interprofessional conflict. One participant stated:

*I think that if dental hygienists don't internalize and believe in themselves and in the worth of the work that they can do with clients, then, you know, that's the foundation. If we don't have that then, you know, all the schools and all the self-regulation and all the "trimmings" won't amount to anything because it really has to be how we work one-to-one with clients or groups that's going to make the difference and we can't work effectively if we don't have the confidence in what we have to offer.* (Participant 42, Community Health Practitioner)

This passage speaks to the idea that the actions and behaviors of individuals within an occupation are equally important to the activities of the occupation itself.

Another participant reflected upon the internal struggle that some hygienists face when their own values conflict with those of their employer.
The constraints will be from within. It's very hard to have these professional goals when you know that if you take a stand ethically in your workplace, you are going to lose your job. Altruism and survival are in conflict. (Participant 14, Diploma Educator)

Participants indicated that in their experience many hygienists are faced with the situation described above. When they are forced to make difficult decisions, hygienists' sense of professional worth is undermined, and this often prevents them from developing professionally. Another frequent observation made by participants is that dental hygienists do not appear to "think" about their own professional development or the professional project of the occupation. Participants posit that if hygienists are not thinking about professional goals of importance to them, then change will not occur. An important question to be considered here is whether or not enough members of the dental hygiene community are sufficiently in tune with the goals of dental hygiene's project for these to be pursued (Macdonald, 1995).

Participants perceive that the domination of dental hygienists by dentists in the workplace, the supervision of hygienists' work by dentists, and even reference to dental hygienists as "girls in the office", are some of the realities that have marginalized the professional role of the hygienist in the public's view and the perceptions held by other professionals, including dentists. Many participants referred to dentists as "gatekeepers", who control all aspects of dental hygiene practice. One key informant described "gatekeeping" from the perspective of her clients.

*I think they have full confidence that we treat them well. Most of the time they comment on the fact that the dentist spends maybe two minutes with them. Most times it's popping his head in and saying "Hello, how are you? Did you find anything when you looked in there?" and if the hygienist says "No", he's gone again. Clients see no need for it. They want it to be a choice for them, whether they choose to see both on that appointment or whether they choose to see one and see the dentist less frequently. (Participant 32, Manager/Leader)*

A comparison may be drawn here from the statement above, between Foucault's conception of the power of the "physician's gaze" and the dentist's disciplinary power as the final authority (exerted through a "glance") over the patient's state of health.
Additionally, Foucault's concept of "surveillance" addresses the ultimate dimension of disciplinary power. In this instance, the dentist imposes a form of surveillance as he oversees and confirms the work conducted by the hygienist.

Participants claim that organized dentistry has no intention of relinquishing any of its monopoly over dental services or its authority over hygienists and their work. One participant expressed this view in the following quotation:

*There are obviously economic and power and gender issues between dentistry and dental hygiene that makes dentists perceive at this time, it is in their best interests if they can do "anything" to impede the professionalization of dental hygiene. They see this as a threat and I don't think it's a surprise to anybody.* (Participant 27, Manager/Leader)

Many hygienists also stated that the concentration of women in dental hygiene continues to plague the occupation's efforts to "get the attention" of mostly male government officials and policy makers, and others who may be significant 'players' in their professional project. Participants perceive that aspiring professions comprised mostly of women do not have sufficient influence on "men in power" and that they sometimes succumb to patriarchy. Several informants also discussed the fact that traditional female roles, such as wife and mother, limit the amount of time that women hygienists dedicate to their own professional growth or involvement in their profession outside of work and home life.

To conclude, several dimensions of the professional project of dental hygiene have been examined in this major study theme. Participants provided substantial details about their perceptions of a professional person, in particular the characteristics and role of the professional dental hygienist. Generally, they were less precise in their discussion of professions and in articulating the goals of dental hygiene's project. Informants identified dental hygiene as an emerging profession which, in their view, possessed some of the traditional attributes normally associated with a profession, such as self-regulation, a code of ethics, and clinical practice standards. They also described dental hygiene as a "modern" profession. In the occupation's efforts to achieve professional status, participants
emphasized the need for dental hygiene to have autonomy from dentistry. The data revealed that autonomy doesn’t necessarily imply dental hygiene practice independent of dentists, but rather improved working relationships and the opportunity for expanded work settings for hygienists including independent practice, for those who choose it. Participants believe that making dental hygiene known to the public and others is critical to the attainment of professional status. Factors that may contribute to the professional project were identified, as well as barriers.

The final study theme to be considered in this chapter is Dental Hygiene Education. Participants’ perceptions of the current and past status of dental hygiene education in Canada will be presented. This theme is connected to the previous themes discussed. For example, the education of dental hygienists is related to the development of a professional self-concept, to dental hygiene practice, to the formation of relationships with dentists, and to the role of individual hygienists in the professional project of dental hygiene.

**Dental Hygiene Education**

The perceptions of participants concerning dental hygiene education were derived primarily from their experiences as students. The findings in this theme relate to education in the past, meaning fifteen or more years ago, as well as facets of current and future dental hygiene education. Similarities and differences between past and present dental hygiene programs were uncovered through the interview data.

**The Past**

Generally, those participants who graduated from dental hygiene over 15 years ago were satisfied with their education and felt that it prepared them well for practice. Of the 34 participants who graduated in the past, 26 attended university programs and 8 attended community college programs. They commented on the fact that the length of their
programs (two years) was adequate, giving them sufficient time to learn requisite knowledge and skills. Basic sciences were a major component of the curriculum. This may be because the university programs were affiliated with dental schools, where basic science dental faculty participated in instructing dental hygiene students. Dental educators had direct involvement in the development of dental hygiene curricula. They played a large part in shaping dental hygiene practice and in creating the structure of the relationships between dental hygiene and dental practitioners. Generally, the nature of these relationships stressed the subordinate and auxiliary role of hygienists to dentists. When dental hygiene and dental students interacted in the learning environment, these roles were reinforced by dental and dental hygiene instructors. One participant states:

Well, I think again I was trained to be an operator in a dental office. I wasn't trained to think about what I was doing. I wasn't trained to put together a plan of care for a human being. I was trained to take orders from a dentist, not to question it but to perform it and to get all the calculus off. That's how I was trained. Gee, I remember thinking to myself after being in practice 6 months - "Isn't anybody ever going to ask me my opinion about anything". I remember saying that at home. Nobody had ever asked. (Participant 10, Degree Student)

Another participant communicated a similar experience.

... it was pretty clear what the working relationship was even at that time... the hygienist was an adjunct to the dentist and there was really more of a kind of supervisor/supervisee relationship, employer/employee. Not as much of a collegial relationship that you might find today in practice, but at that time, that's the learning I had. We were very much more in an "assistant" capacity. (Participant 22, Diploma Educator)

This participant suggests that relationships between hygienists and dentists today are somewhat more collaborative. While that might be true, many other participants indicated that the predominant relationship continues to be a dependent one. It appears that in the past, the content and structure of dental hygiene education were consistent with the realities of practice. In other words, students were educated for a particular role (primarily clinical) during their training period that was virtually identical to the role they assumed in the workplace. These roles today do not appear to be as clearly defined or agreed upon by dental hygienists and dentists.
As has been discussed previously in this chapter under the theme *Development and Profile of Dental Hygiene*, participants emphasized the influence of their instructors as "strong" role models in the development of a professional self-concept. They also distinguish between the inculcation of "professional" values in the past and the present. Participants revealed that in the past, students came to understand the professional appearance of the dental hygienist largely through "symbolic meanings" such as the "cap", the uniform and white shoes. Consistency in "professional appearance" was emphasized, individuality was not. Participants claim that today, this type of symbolism has all but become extinct. In the past, students learned professional behaviors mostly through instructor role modelling. These behaviors were largely defined by interactions with patients. In discussing the status of current dental hygiene education programs with participants, they expressed many of the same ideas.

The Present and Future

Most of the participants who graduated from dental hygiene within the past fifteen years had attended university based programs. Generally, all participants were positive about their educational experiences. However, informants within this group of more recent graduates, as well as many of the participants who graduated in the past, were critical of some facets of dental hygiene education being offered currently. These criticisms relate mostly to the relationship between dental hygiene education models and the professional project of dental hygiene, as well as to emerging trends in dental hygiene practice.

Although not explicitly stated by the participants, the analysis of the interview data suggests that dental hygiene education programs may not be adapting program content quickly enough to keep pace with changes in practice, developments in the profession such as self-regulation, the alteration of working relationships between hygienists and dentists, or the evolution of newer dental hygiene roles such as manager or client advocate. If these perceptions are accurate, there may be a few reasons for this. First, all of the university
based programs are still affiliated with dental schools. In this setting, dental educators and administrators continue to influence the development of dental hygiene curricula and are often involved in the instruction of dental hygiene students. If dental academics do not support changes proposed by dental hygiene programs, they can serve as a barrier to the advancement of dental hygiene education. Second, although community college based programs are not associated with dental schools, educational institutions may still be influenced by the politics of organized dentistry and by the authority of provincial ministries in health and education. These programs may be obligated to follow guidelines concerning admission requirements, enrollment levels, and program duration.

Several participants, including educators themselves, perceive that many dental hygiene programs continue to model curriculum after traditional dental practice settings, in which the dental hygienist is an employee, subordinate to the dentist, and works under supervision. They argue that programs must meet the challenge of altering the learning environment for students to include curriculum content that prepares hygienists to practice in expanded work settings such as personal care homes, acute and chronic care facilities, or in independent practices. These participants claim that the current education system in dental hygiene places too much emphasis on the dental hygienist's clinical role and dependence on the dentist. This system has created and perpetuated the subordination of dental hygienists to dentists. An Alberta diploma educator states:

*I'm not sure if this is cynicism or accurate but it seems to me that we create dental hygienists that when they're out in practice, they become very comfortable within the dental office environment where they are essentially "taken care of" and work for somebody else and I guess I feel that one of the limitations of practicing hygienists is that they seem to me to have a very narrow vision, and so I think educational institutions have a great responsibility in helping to create a young professional.... I think it is the responsibility of educational institutions to really create a dynamic model and I think if you look at most institutions they still put huge emphasis on their clinical practice programs far beyond what is actually needed to create a competent professional.... If we figured out what amount of time you need to make a person clinically competent and then at that point, put them into other more meaningful independent collaborations, perhaps with other groups, or in other settings that we would expose them much more than we do.* (Participant 29, Diploma Educator)
The perceptions of this participant appear to reinforce what other participants communicated about the need for educators to take a more active role in teaching students to have the confidence in their knowledge, skills, and professional self-worth to uphold their professional values in the transition from school to the workplace. Many participants support the notion of a lengthy professional socialization process during the education of dental hygiene students. Another diploma educator from British Columbia states:

*I think an individual that has a good strong background with sufficient time is much more likely to be able to successfully promote those values in a practice that may be a lot different than what the dentist's values are. I think if you have a real short program you have concepts of supervision, control, all of those kind of issues that it's really easy to lose those good values when you get into a dental practice.* (Participant 26, Diploma Educator)

Related to participants' views on adequate time in dental hygiene curriculum for formal socialization to occur, were their concerns about the current dental hygiene education model in Ontario. The length of dental hygiene programs in this province is one year, in comparison with most other Canadian programs that are a minimum of two academic years in duration. These participants perceive that there is insufficient time in these programs to allow students to internalize professional values and behaviors, and to prepare graduates for “careers” versus “jobs”.

Overall, participants were supportive of degree programs in dental hygiene, but not all participants believed that the current diploma model should be replaced with baccalaureate level education to prepare dental hygienists for entry to practice. Some hygienists felt that the lengthy education provided through degree education would resolve the issue of two sub-cultures in dental hygiene: professional persons and technicians. Degree education would serve to eliminate the notion of technicians by curriculum that emphasized the dimensions of a profession, such as research, critical thinking, and abstract knowledge. Graduates of degree programs would be expected to contribute to the professionalization of dental hygiene. Other informants perceive that the length and nature of degree education would serve to address the current unmet needs in diploma programs, such as preparing graduates for contemporary dental hygiene practice and working in
partnership with other health professionals. Although at present, the Canadian Dental Hygienists Association hasn’t recommended a shift from diploma to degree education for entry into practice, document analysis revealed that this organization supports the establishment of baccalaureate and graduate programs in dental hygiene (CDHA, 1997, 1999a).

In short, participants suggest that the function of dental hygiene education is critical in exposing graduates to role models and curriculum content that embrace the responsibilities of the contemporary professional, that is, a professional person who is adaptable, possesses problem-solving skills, and can function in both autonomous and collaborative work environments. They believe that some current programs fail to meet this goal. In the view of participants, dental hygiene education is a fundamental enabling factor in the professional project of dental hygiene. Educators “set the path” for dental hygienists to be prepared as professionals, to understand and “live” the professional role, and to contribute to the profession.

Summary

This chapter has detailed the four major themes of the study, Development and Profile of Dental Hygiene, Relationships between Dental Hygiene and Dentistry, Dimensions of the Professional Project of Dental Hygiene, and Dental Hygiene Education. Data analysis of interview transcripts and selected documents uncovered the participants’ conceptualization of the dental hygiene culture (practice, organizational structure, educational profile of members) and the status of the occupation (history, relationships, professionalism). While the findings reveal that dental hygiene is an occupation undergoing change, the participants provided rich accounts of their individual experiences and perceptions of the occupation, its members, accomplishments, aspirations, and struggles. Symbolic interactionism, the conceptual framework of the study, supports this
outcome whereby the development of one’s beliefs, values, and perceptions evolve from an individual’s lived experience. The development and current status of this relatively young occupation appears to be the product of strong links between the historical foundation of dental hygiene, its relationships with dentistry, the imbalance in the membership, the feminized nature of the work of dental hygienists, and public perceptions. The understandings, experiences, and perceptions of dental hygienists and students, who represent various constituent groups within the dental hygiene community, were found to be similar. An introspective and critical analysis of these findings in relationship to the literature on professions will be presented in the next chapter.
CHAPTER SIX

DISCUSSION

The focus of this study was an exploration of the culture of dental hygiene and its occupational status. This was done through in-person interviews with 48 members of the dental hygiene community and extensive analysis of relevant documents. During the conduct of the research, a large volume of data was collected followed by intensive analysis. While Chapters Four and Five presented the findings of this study, Chapter Six offers an analysis of these findings as they relate to the literature and to the theoretical perspectives introduced in Chapters One and Two. This chapter begins with a brief summary of the findings followed by presentation of each theme as it relates to theory and the literature. The chapter concludes with the implications for future research.

Summary of the Findings

The results of this study show that the perceptions of key informants and non-key informants are based largely on their lived experiences rather than on critical reflection on their environment. Almost no variations were found in the perceptions of participants across sample groups, which may be a reflection of the similarity in their experiences. Although participants freely described the circumstances of their professional lives in relation to their work, interactions with others, and the occupation of dental hygiene, many of them do not appear to analyze the realities of their circumstances to any great extent, or the impact of these realities on dental hygiene's professionalization. Many private practice practitioners are caught up in a restricted environment (dental office setting) and that world becomes the basis of their perceptions. However, during the course of study interviews, a
number of participants stated that they intended to reflect further on their discussions with the researcher.

Data analysis revealed that the occupation of dental hygiene is undergoing a transformation (Dental Hygiene in Transition). Evidence of this transformation was documented as participants repeatedly spoke of perceived changes in practice, the occupational status of dental hygiene, increasing professionalism, and advances in education. Dental hygiene documents confirmed that dental hygiene is in transition. This key theme was found to be central to the development of four other related major themes uncovered during the course of interviews and document analysis: Development and Profile of Dental Hygiene, Relationships Between Dental Hygiene and Dentistry, Dimensions of the Professional Project of Dental Hygiene, and Dental Hygiene Education.

The findings of this research suggest that while dental hygienists were able to provide meaningful descriptions of dental hygiene's culture in response to interview questions, they did not present a shared understanding of its professional project. Indeed, in many instances, individual participants were unable to articulate, or even hypothesize about a collective notion of dental hygiene professionalization. On the other hand, organized dental hygiene has attempted to document an occupational vision for dental hygiene. The findings of the study suggest that as part of this vision, dental hygiene has attempted to define a particular jurisdiction of professional work (Abbott, 1988) or an occupational niche that sets them apart from the work of other professionals, particularly dentists. This jurisdiction, as described by participants and revealed through document analysis, pertains to preventive and therapeutic oral hygiene care.

Further, dental hygiene is attempting to construct a particular cognitive domain or theory that supports their "specialized" work. This finding can be understood in terms of a neo-Marxist interpretation of professions and capitalist institutions, particularly the work of Larson (1977) who claims that a professional project is normally tied to the creation of a professional market and a link between a formal knowledge base and a particular market
service (Witz, 1992). However, in this study, the perceptions of participants with respect to evolving dental hygiene theory and a distinct market for dental hygiene services are not well defined. Generally though, participants perceive that expanded work settings, such as community clinics and long-term care facilities will provide a new market for the services of hygienists in the future. The establishment of such a market however, would require a change in the state sanctioned authority of dentists over dental hygienists that currently exists in most jurisdictions, as well as widespread consumer support for independent dental hygiene services. Further, applying the concept of 'competitive capitalism', dental hygienists would, in all probability, need to secure direct reimbursement for their services through insurance carriers. At present, only dentists are remunerated for dental hygiene services.

In this investigation, the culture of the dental hygiene occupation was conceived to be cohesive in terms of organizational assets such as professional associations, practice standards, and educational guidelines, but sub-divided with respect to its individual members and their attitudes and beliefs about the dental hygienist role and the occupation itself. Generally, participants perceive that within the dental hygiene community, there are hygienists who see themselves as professionals and are engaged in dental hygiene's professional project, and others who view themselves as technicians whose only purpose is to deliver a service, and not to pursue professionalism. Diploma students did not comment on this finding, likely because they had not been exposed to dental hygiene practitioners in the workplace. Based on neo-Marxist and neo-Weberian concepts of professionalization, professionals possess similar motives related to social and economic status, but not all members of a profession may actively pursue the professional project. Macdonald (1995), in his investigation of the sociology of professions, extends this idea by stating that "the elite of the group articulate its objectives and set in train the work needed to achieve them, and although the individual members may pursue their own personal ends and may not be
fully conscious of the group goals, they are normally sufficiently in tune with the group objectives for these to be pursued" (p. 188).

The findings of this research suggest that the composition of the dental hygiene community in Canada is not comprised of elite and individual members who are all cognizant of, and committed to, professionalization. Rather, there appears to be dental hygienists (representing every constituent in the community) who are supportive of dental hygiene professionalization, and others (limited to private practice practitioners) who are not engaged in professionalism and have not chosen to pursue professional status. Based on the perceptions of participants, these hygienists have entered dental hygiene for the sole purpose of being salaried technicians. Further, it may be hypothesized that these dental hygienists choose to work under the direction and supervision of dentists. Examples of divided occupational cultures can also be found in nursing (Bullough, 1995; Parkin, 1995; Davies, 1996). In a recent investigation of the professional development of the nursing occupation (Dent & Burtney, 1997) the concept of "professional segmentation" was applied to the study of practice nurses in the English Midlands. In this study, two different types of practice nurses were discovered, those who actively engaged in a professional discourse in order to extend their role, and those referred to as the 'rank and file' segment who passively accepted the doctors' definition of their role. Similarly, this study has presented evidence of a segmented dental hygiene community. An explanation for this segmentation may be related to the recruit's non-professional image of the dental hygienist prior to entering the occupation, dental hygiene's failure to adequately enculturate its members, or perhaps the structure and focus of some dental hygiene education programs that emphasize the technical aspects of the hygienist's role, rather than professional dimensions.

The importance of the finding of a subdivided culture in understanding dental hygiene's professional project can be related to Larson's (1990) notion of "collective mobility". In Larson's conceptualization of a profession, the significance of the link between the aspirations of individuals and the collective action of an occupational group is
underscored. Further, she places great importance on the relations between 'rank and file' members and the elite of a profession. If in fact the success of a professional project is dependent, in part, on the collective actions of members of an occupational group then the results of this study point to shared professional aspirations of dental hygiene's elite, namely, managers, leaders, and educators, and to dissimilar aspirations of some, but not all, of its grassroots members. This lack of ideological cohesion amongst the members of the occupation may compromise dental hygiene professionalization.

**Study Themes**

As a means of coordinating this discussion of the results, and in the interest of examining the major findings within each of the study themes that are most relevant to the research problem, the core theme and each of the major themes will be discussed individually. Literature in sociology, education, law and health care were reviewed in order to locate the study within the context of the study of professions, and what was known about the professional development of the dental hygiene occupation. These bodies of literature were consolidated within the first two chapters. Minimal research has been conducted in dental hygiene with respect to the professional project of this health occupation. One Canadian study investigated the perceptions of Alberta dental hygienists and dentists regarding the status of dental hygiene through the analytical perspective of attribute theory (Lautar, 1993). Several other studies conducted in the United States have examined various aspects of the professional socialization of dental hygiene recruits (Kraemer, 1986, 1990; Wayman, 1986).

This research presents a first effort at documenting the perceptions of representatives of each constituent group within the dental hygiene community in Canada. The scope of the study, its qualitative design, and theoretical complexity allowed the researcher to explore, in depth, the perceptions and experiences of individual participants.
Unlike past studies that employed attribute theory, this study has gone beyond documenting the characteristics of dental hygiene as an emerging profession to incorporate the voices of dental hygienists themselves. As well, the qualitative methodology of this research allowed the participants, in particular the non-key informants, to ponder and reflect upon the topics introduced by the researcher. For example, a number of non-key informants were surprised when introduced to certain topics such as the culture of the dental hygiene occupation. From these insights offered by the participants, the core theme and the major themes emerged.

**Dental Hygiene in Transition**

Evidence of the core theme *Dental Hygiene in Transition* was revealed by participants' responses to the following two research questions: "What are the beliefs held and shared by members of the dental hygiene occupation with respect to an emergent ideology of dental hygiene?" and "What are the claims made by members of the dental hygiene occupation with respect to the occupation's professional status"?

There is minimal research on the substance of professional ideology, but claims of knowledge and skill often function as an occupational ideology (Freidson, 1994). Ideologies of skill and public service are often advanced by workers attempting to gain control over their work and working conditions. In response to the first question cited above, participants identified a developing ideology in dental hygiene by way of their descriptions of a changing knowledge base, one that was moving from a technical foundation to research oriented and evidence based knowledge. They extended these perceptions by claiming that this new knowledge would be utilized in an advanced process of care that would emphasize a holistic approach to treating clients.

It may be assumed from these claims that this developing knowledge as applied to a modified type of dental hygiene care would ultimately improve the services provided to the
public by hygienists. While the perceptions of participants concerning an emergent ideology appear to be driven by altruism, they may also be related to the occupation's desire to define its knowledge in relation to the specialized skills of hygienists. If one accepts that knowledge and power are intertwined (Macdonald, 1995), then the occupation of dental hygiene appears to be determined to define its increasing professionalization in relation to its developing knowledge. Dental hygiene is searching to create knowledge that is grounded in science but yet has practical value for clients. Dental hygiene draws on several discipline areas that explain dental hygiene practice and the special skills of hygienists themselves (caring, humanitarian, communicative). Here, the notion of 'discourse' can be important in explaining this source of professional power. That is, those individuals who can define and claim for their own, the language and ideas to be used in a particular area of social/professional life have derived power from knowledge (Macdonald, 1995; Miller, 1998). The developing ideology in dental hygiene appears to be influenced by evolving dental hygiene theory that supports the 'preventive' practices of dental hygienists as well as the increasing emphasis on the 'caring' aspects of dental hygiene practice.

Participants' response to the second research question identified above, concerning the occupational status of dental hygiene, was that it is in transition, that dental hygiene was an "emerging profession" and that a number of recent developments contributed to this status. For example, the perception of study informants was that changes in the regulation of dental hygienists, leading to self-governance in several jurisdictions had elevated the status of the occupation. In actual fact, while self-regulation provides for a level of occupational control over the discipline of members, the administration of registration and licencing procedures, and responsibility for establishing requirements for practice, other aspects of professional practice may be outside the occupation's boundary of authority (Felton, 1998). For instance, participant interviews revealed that generally, dental hygienists have minimal control over their work because of direct dentist supervision.
In the case of dental hygiene self-regulation, supervision requirements are still in place in some jurisdictions. Although the state has recognized the value and specialization of dental hygiene work, in the view of the participants, public awareness and positive attitudes towards hygienists remain low. Data analysis also revealed that in the experience of many participants, dentists' perceptions of the role of the dental hygienist is as a technician rather than a professional. This finding is supported by Lautar’s (1993) study of the perceptions of Alberta dentists and dental hygienists. Many informants claimed that for dentists, the relationship between individual hygienists and dentists was an economic one, that hygienists provide a service from which dentists derive income. Larson (1990) refers to this as a monopoly in the market for services and a profession's control over the producers of the service. In combination, these two factors result in economic and social status. It is in dentistry's favor to control the work of dental hygienists and the conditions under which dental hygiene services are provided.

Claims by participants also made reference to the association between an improved status for the dental hygiene occupation and women's increasing status in society. However, based on the findings in the study that detailed many participants' views of the continued gendered and stereotypical behaviors of male dentists towards female hygienists, it is not certain if these gender issues have been reconciled or have altered. It appears that while, at an occupational level, dental hygiene has experienced some advancement such as self-regulation, at an individual level, the relationships between practicing hygienists and dentists have barely altered over time.

The impact of the patriarchal structure of dentistry is witnessed at many levels. In addition to the nature of working relationships, participants described what may be termed 'patriarchal discourse', used by dentistry to legitimate a whole range of barriers to prevent the professional development of dental hygiene (Walby & Greenwell, 1994; Macdonald, 1995). For example, study findings revealed that dentists often refer to hygienists as girls in the presence of patients and that hygienists feel demeaned by this language. This
patriarchal practice would appear to keep the hygienist in her place while reinforcing to patients the low position of the hygienist in the labor hierarchy of the dental office. Another example of such a practice is observed in the content of the Nova Scotia Provincial Dental Board (1992) regulations pertaining to dental hygienists. From postmodernist/poststructuralist perspectives, the deconstruction of language in this document that refers to the 'direct supervision' of hygienists, 'delegation' of tasks to hygienists, and the 'responsibilities' of the dentist for the work performed by a hygienist, point to the entrenched powers of dentistry that are, in this case, embedded in legislation. Poststructural feminists claim that every definition 'deconstructs' itself, that is, it tends to unwind as the definition is probed beyond the surface to its foundation (Agger, 1991). It may be concluded that despite the perceptions of participants concerning possible changes to gender and power relations between dental hygiene and dentistry, these relations continue to be unequal, dominated by dentistry and seemingly impervious to eradication.

**Development and Profile of Dental Hygiene**

The study questions that focused on the major theme *Development and Profile of Dental Hygiene* are: “What is the dental hygienist’s professional self-concept? How does formal education influence the dental hygienist’s professional self-concept? How does workplace socialization influence self-concept?” and “Is the practice of dental hygiene 'women’s work' and how is this relevant to dental hygiene’s professional project?” The second question is also addressed in the discussion of the major theme *Dental Hygiene Education*.

In response to the questions pertaining to the development of the dental hygienist's self-concept, participants emphasized the importance of their dental hygiene education in shaping their understanding of their professional role. Instructor role models were seen as the most critical factor in this process. This claim is supported by the literature on
professional socialization. Study participants, without exception, described the dental hygienist’s role as a caring one. Strong interpersonal and clinical skills, the desire to educate people about their oral health, and the ability to facilitate individual responsibility for health were cited as the basis for the dental hygienist’s professional self-concept. Although many participants stated that their dental hygiene educational experience led to the development of a positive self-concept and a high level of skill, several were critical of the fact that despite their qualifications, they were instructed by dental hygiene teachers to assume a subordinate role to the dentist and take direction. Another important finding in relation to self-concept is that for some participants, the positive self-concept that they developed during their education was negatively affected by their relationship with an employer dentist in the workplace. That is, an individual’s confidence and self-esteem were replaced with self-doubt and a poor self-image because of ‘surveillance’ strategies imposed on them by the dentist, for example, ‘checking’ their work and determining dental hygiene care plans (Foucault, 1980; McNay, 1992).

When the professional experiences of participants were explored within the framework of symbolic interactionism, it was discovered that many dental hygienists developed their understanding of the culture of dental hygiene primarily through their interactions with dentists in their work environment, and with dental hygienists outside of their workplaces. Participants often referred to the isolation of dental hygiene practice. This means that because of the structure of most dental offices, that is, solo dental practices, a dental hygienist rarely has the opportunity to work with another hygienist. Consequently, their beliefs and cognitions are shaped in the workplace in part through their relationships with dentists, rather than hygienists. These perceptions are further influenced by their relationships with other hygienists who they interact with outside of work, in situations such as at conferences, association meetings, or at continuing education courses. It would appear, based on the perceptions of participants, that many practitioners do not have regular opportunities to engage in professional discourse with dental hygienist
colleagues. This may negatively influence the professional growth and development of individual members of the dental hygiene community, and the momentum of the professional project.

The 'caring' nature of the work of occupations such as dental hygiene and nursing is tied to social perceptions of low-status work, menial tasks, routinized work, and domestic duties and consequently fails to be recognized as having any marketable scarcity value (Parkin, 1995). From the perspective of neo-Marxist feminist writers, dental hygienists are taken for granted as being basically 'vocational', their work is viewed as an extension of the work of wives and mothers. The physical and emotional work of caring is seen as women's natural work (James, 1992; Smith, 1993) and as such no great financial reward or autonomy are justified. Davies (1996), in her discussion of ideas related to old and new professionalism, claims that professionalism remains tied to nineteenth century ideas about masculinity which emphasize the active, competitive person rather than the more reflective, interdependent, and caring one. This author is critical of nurses for assuming that they have a monopoly on altruism, caring, and commitment when 'what they are doing is replacing the celebration of cultural masculinity in professions with an alternative celebration of femininity rather than transcending the two' (p. 56). Macdonald (1995) connects caring and patriarchy by asserting that the caring professions, such as dental hygiene, are a classic example of the way the values of patriarchal society are built into institutions and practices. While the participants in the study applaud the caring nature of hygienists and hold it up as the foundation of their practice, it serves to marginalize the work of hygienists because it has been constructed by dentistry to reflect subjective, uncomplicated and non-restorative care. The work of professionals, on the other hand, is constituted by objectivity, science and restoration and curing. The caring feature of dental hygiene has devalued the importance of the work and the providers of the service.

Most participants, in response to questions about dental hygiene and gender, expressed the view that dental hygiene work was not 'women's work', that men were
equally capable of being competent and caring dental hygienists. However, they acknowledged that gender played a large part in the perceptions of the public and others with respect to the dental hygienist 'stereotype'. Repeatedly, participants emphasized their perceptions of the impact of the gendered nature of dental hygiene work, the gender composition of dental hygiene, and the interrelationships between female dental hygienists and male dentists. Data analysis revealed that informants generally are unable to separate these gendered facets of dental hygiene from the occupation's aspirations for professional status or its current status. Gender plays a critical role in the working lives of hygienists and in the professional project of dental hygiene.

**Relationships Between Dental Hygiene and Dentistry**

One study question was related to the major theme *Relationships Between Dental Hygiene and Dentistry*: “How can the relationship between the occupations of dental hygiene and dentistry be defined with respect to structure, hierarchy, organization, occupational boundaries, power, gender, and professional roles?"

In response to the question above, data analysis presented a consistent view of participants with respect to their perceptions of the relationships between individual dental hygienists and dentists, and between dental hygiene and dentistry. Key informants and non-key informants who practiced dental hygiene described their own working relationships with dentists as being favorable and collegial. This meant that they had the freedom to exercise their professional skills and knowledge in the dental practice setting without a great deal of interference from the dentist. It is interesting to note that the dental hygienists in the study, most of whom were selected by the researcher and others who volunteered to participate, experienced positive relationships with dentists. An explanation for this might be that these particular participants are committed to their professional role,
or they are selective in their choice of an employer dentist whose beliefs are similar to theirs.

Symbolic interactionism may be applied here to explain how graduate hygienists have learned and conceptualized their relationships with others, particularly dentists. Study findings in this regard suggest that for those participants who attended a dental hygiene program that was affiliated with a dental school, their interactions with dental students and dental instructors taught them to be subordinate to dentists and to conceive of themselves as 'auxiliaries'. In addition to these interactions, the meaning of symbols such as gestures, gendered language, and a dress code were internalized by participants. Male dental educators communicated to female dental hygiene students that 'women' rightfully assumed the dental hygienist's role. They came to understand their auxiliary role and position in the dental office setting through learned behaviors during their dental hygiene education. Often these behaviors were not negotiated between students and teachers so much as they were 'ordered', dental hygiene students were directed to act in certain ways. It may be suggested here that students sometimes see themselves as vulnerable individuals in the learning setting. The way in which novices choose to make sense of their relationships with others is often through reflection. Many study participants indicated that over the course of their working lives they have reflected on their initial student experiences and have sought to renegotiate their subordinate position in the workplace.

Participants claimed that many hygienists work under the strict and direct supervision of dentist employers who frequently assert their authority as the employer by ordering hygienists to shorten appointments and treat more clients in a day in the interests of income generation. Here, conflict between the traditional socialization of women in society which fosters compliance and the principles of professional dental hygiene ethics may be experienced by practicing hygienists. At the occupational level, participants discussed the power of organized dentistry (structure, influence of leaders, political clout) to battle against the initiatives of organized dental hygiene to raise its professional status.
Informants described the efforts of provincial dental organizations to thwart any action on the part of dental hygiene associations to seek self-regulatory status, to expand the scope of dental hygiene practice, or to obtain the legal right to offer dental hygiene services outside of dentists' offices.

The neo-Marxist concept of professional dominance, as described by Turner (1987), is an important element in any analysis of the transformation of an occupation to a profession, for it represents a significant barrier for most occupations wishing to professionalize. Witz (1992) claims that the institutions of a traditional and modern patriarchal society sustain the institutionalization of male power and privilege within the medical division of labor between medicine and related occupations such as nursing or dentistry and dental hygiene. The sociology of dental hygiene is not as well documented as is the case of nursing. However, the subordination of dental hygiene to dentistry, as described by the study participants, follows some of the same patterns as nursing to medicine. Subordination is a mode of professional dominance that occurs relative to historical and social factors (Turner, 1987; Willis, 1989; Blishen 1991). Historical and structural similarities in the development and everyday lives of dental hygienists and nurses involve occupational and patriarchal subordination, lack of autonomy and control over work, and gender and power imbalances that prevent these occupations from achieving professional independence. Study participants frequently discussed the gendered subordination of hygienists to dentists, beginning with the creation of the dental hygiene occupation in Canada in the 1950s. A classic example of this was the fact that the University of Toronto permitted only women to enter into dental hygiene training, thereby establishing dental hygiene as a women's occupation and the work of hygienists as women's work.

The occupational status of dental hygiene and relationships between dentistry and dental hygiene can also be examined within the neo-Weberian framework of closure theory (Parry & Parry, 1976; Parkin, 1979; Freidson, 1986, 1994; Witz, 1992; Macdonald, 1995;
Applying this perspective, dominant professional groups, such as dentistry, employ exclusionary and demarcationary strategies to achieve inter-occupational control over subordinate workers, that is, dental hygienists. These strategies include the regulation of producers, the establishment of jurisdictional boundaries, and the establishment of a monopoly of skills. Data analysis revealed that each of these strategies was identified by participants as the means by which dentistry dominates dental hygiene, and exercises professional hegemony in the dental division of labour. For example, hygienists described the continuous efforts of provincial dental organizations to maintain legal authority over the regulation of dental hygienists, who are the primary producers of dental hygiene services. Also, participants perceived that any encroachment by independent dental hygienist practitioners into the dentist dominated oral health services market posed an enormous threat to dentistry's monopoly and social and economic control over these services. Witz's (1992) model of occupational closure adds a gendered dimension to closure strategies, suggesting that male dominated professions such as dentistry do not exclude women, but are inclusive of female dental hygienists in the occupational division of labor through methods of discrimination and subordination.

Social closure theory suggests that subordinate occupational groups, such as dental hygiene, may use inclusionary and dual closure strategies to resist the tactics of dentistry (Freidson, 1970; Witz, 1992). These strategies require a subordinate group to resist the demarcation strategies of a dominant group as well as establish a position within a division of labour by employing exclusionary tactics itself. Evidence of closure strategies employed by dental hygiene is illustrated by the participants' narratives of inter-occupational disputes between provincial dental hygiene and dental organizations. In particular, dental hygiene managers/leaders and educators spoke about conflict that arose out of dental hygiene's pursuit of self-regulation. It is interesting to question why the impetus for this aspect of dental hygiene's professional project began decades after the establishment of the occupation and its domination by dentistry. This might be explained by more recent
heightened efforts on the part of the leadership within dental hygiene organizations, or by the increased status of women in society, or improved political and public support for emerging professions.

In terms of a dual closure strategy, several study participants spoke about dental hygiene’s efforts to redefine the market for its services, thereby altering its position in the division of labour. That is, these hygienists referred to alternative work settings for hygienists such as community clinics, institutions, acute/long-term health care facilities, and home care. In these settings practitioners would provide service as part of a multidisciplinary health care team without being supervised or directed by dentists. This would likely alter the subordinate status of dental hygienists and redefine their relationship with dentists. As a result, dental hygiene’s position in the division of labour may be improved to some extent, but would probably not alter dentistry’s monopoly on the range of oral health services it currently delivers. Part of consolidating this position would require dental hygienists to contest the demarcation strategies of any occupation that might infringe on dental hygiene’s occupational scope of practice. In this investigation participants referred to the attempts of organized dentistry, in some jurisdictions, to expand the clinical practice of dental assistants to incorporate scaling techniques. By doing so, dentistry would be employing a form of desking (Turner, 1987) and closure strategies to prevent dental hygiene from establishing any sort of monopoly on the provision of clinical oral hygiene services such as scaling. Dentistry, in this instance, would be regulating the producers of a similar service. In turn, this may impact employment opportunities for hygienists as well as potentially lowering the cost of the service, and the income of dental hygienists. Although study participants did not provide evidence that dental hygiene had employed exclusionary strategies to prevent dental assistants from acquiring the skill of scaling, they alluded to the fact that dental hygienists might be resistant to this encroachment into their specialty area of practice. This being the case, dental hygiene would then be employing similar tactics to dentistry in order to protect its jurisdiction.
Dimensions of the Professional Project of Dental Hygiene

Several research questions were associated with the theme *Dimensions of the Professional Project of Dental Hygiene*. They include: i) “What is meant by the phrase ‘professional project of dental hygiene’? Who is engaged in this project and why? Are dental hygiene’s professionalization strategies like or unlike similarly placed professional projects of occupations such as nursing? How?”, ii) “What are the barriers to the professionalization of the dental hygiene occupation? What are the influencing factors?”, iii) “To what extent are dental hygienists involved in personally and professionally relevant activities related to professionalization which are outside of the work setting?”, iv) “What are the perceptions of dental hygiene students with regard to the dental hygienist’s professional role, and are these consistent with the perceptions of dental hygiene representatives”?

Two significant findings concerning the professional project of dental hygiene (in addition to the barriers previously discussed under the other major themes) were uncovered through content analysis of interviews and documents. First, participants did not appear to have a clearly defined or consistent notion of what the attainment of professional status for hygienists or the occupation would mean. References were made to a ‘collection of desired changes’ in the working lives of individual hygienists such as improved working relationships with dentists, less restrictive practices by dentists over dental hygiene work (greater autonomy for dental hygiene), and the opportunity for independent dental hygiene practice. At the occupational level, the national association of dental hygiene (CDHA) has articulated professional goals related to self-regulation, and greater opportunities for dental hygiene research and advanced education.

The concept of a professional project, when aligned with a Weberian action approach, offers a means of understanding how knowledge-based occupations undertake their goal of being accepted in society as professions. Macdonald (1995) has recently
modified Larson’s original conception of the professional project to make sense of professions in modern society. In Macdonald’s view, several aspects of “the project” offer a theoretical framework for the study of occupations aspiring to be professions. Occupations must have a special relation with the state in order to achieve a monopoly and these relations are influenced by the political culture or the political power network (Mann, 1993). Once a profession secures a monopoly over its services it still competes in the marketplace against others who can provide similar or complementary services. A profession must continually defend its jurisdiction. While professionals are largely seen by society as providing important services for the public's well being, the actions of professional bodies are more likely viewed as self-seeking. Nonetheless, professional organizations must be able to convince legislators and the public that professions are motivated by public good. Finally, social closure allows the overall strategy of a professional group to be understood. This concept provides a basis for understanding the progress of the professional project, the nature of the relations between and within occupations, and the way that the discriminatory actions of a particular occupation contribute to the structured disadvantages of gender.

The researcher has identified dental hygiene’s efforts at professionalization as described by study participants, as a professional project. The occupation’s actions relative to self-governance, disputes with dentistry, developing theory, and the establishment of a few independent dental hygiene practices suggest that the occupation is seeking professional status. When applying Larson’s and Macdonald’s conceptualization of the project to the research results, it can be concluded that dental hygiene has had some success in state relations, as demonstrated by participants’ discussions of self-regulation. Although participants admitted that, generally, dental hygienists are not politically astute and have only recently become familiar with the political process. In terms of a professional monopoly, dental hygiene services are not the monopoly of hygienists, and at this point in time it doesn’t appear that dental hygiene has established a widespread and distinct market
for its services outside of the practices of dentists. One might speculate that should dental hygiene establish a jurisdiction in the future, it would be continually threatened by dentistry’s professional dominance in the division of labor, and potentially, by the actions of related oral health personnel such as dental assistants.

Occupational closure strategies, in part, explain the nature of the conflict between dental hygiene and dentistry. Dental hygiene is pursuing a course of increasing self-regulation in order to achieve some level of autonomy from dentistry, while dentistry works at sustaining its professional monopoly and dominance over all workers in the division of labour. Witz (1992) adds another dimension to the concept of the project, that is, the gendered aspects of professional projects. She places dominant professions such as dentistry and medicine within the context of class and gender relations, and asserts that at the core of female professional projects, are the constraints of patriarchal structures both in society and within professions. The study findings provide substantial evidence of gender struggles between individual hygienists and dentists as well as at the occupational level. In speaking of the everyday lives of hygienists, participants described workplace circumstances that demonstrate the authority, control, and gendered domination of dental practitioners over dental hygiene practitioners.

A second important finding within this major theme was that, although the participants did not have a common standpoint on dental hygiene professionalization, they framed their discussion of dental hygiene’s development by describing it as a ‘modern day’ profession. For most participants, this was conceptualized as something different than established professions such as medicine and dentistry in terms of knowledge and practice ideals, and somehow related to women professionals. The research results, in terms of participants’ discussions of modern professional dental hygiene practice and dental hygiene professionals themselves, may be understood relative to post-modernist theory. Post-modernism considers multiple perspectives of phenomena such as professionalism, it is anti-reductionistic, and rejects grand narratives about history, society and perhaps, the
traditional notion of professions. For example, in a recent study of modern day nursing, Davies (1996) distinguishes between old and modern professionalism. She posits that mastery of knowledge has been transcended by reflective practice, that unilateral decision making has been replaced with interdependent practice, that autonomy and self-management have shifted to supported practice, and that the practice of being “engaged” in client care is more desirable than practitioner “detachment”. Davies argues that the concept of a health professional has been modelled on a masculine world view which stresses the active, competitive person rather than the more reflective, interdependent one.

The study participants, through their descriptions of dental hygiene practice and self-perceptions of hygienists, articulated a vision of the modern day hygienist that appears to reflect a post-modernist perspective. For example, they spoke of dental hygiene practitioners as caring and highly interactive with clients, a form of reflective practice. In this light, knowledge is seen as encompassing uncertainty and drawing on experience, rather than only being formal and abstract in nature. Also, many participants referred to a transition in dental hygiene practice towards an interdisciplinary (the application of multiple knowledge bases) and multidisciplinary approach (multiple team members) to the delivery of dental hygiene services. The results of this research suggest that at the same time as the dental hygiene occupation is engaged in a professional project, the traditional concept of profession and occupational monopolies is in some instances being questioned by semi-professions (especially female dominated occupations), the public, and by government in light of health care reform, increased consumer awareness, and women’s desire for increased status. The challenge for dental hygiene, and other similarly placed occupations such as nursing, may be society’s willingness to consider a newly constructed definition of profession, one that dismantles patriarchal and traditional views of the professional person.
Dental Hygiene Education

Study findings related to the final major theme Dental Hygiene Education were revealed in response to questions pertaining to the development and profile of dental hygiene as well to the following research question: “How does formal education influence the dental hygienist’s professional self-concept?”.

Participants’ responses to this question were addressed in the earlier section on the Development and Profile of Dental Hygiene. The finding relevant to this discussion of the status of dental hygiene is: the current model of dental hygiene education does not appear to adequately prepare hygienists for advances in the occupation and changes in practice. Some dental hygienists have suggested that the current system of dental hygiene education in Canada may be fostering the production of both ‘technical’ and ‘professional’ graduates. Ultimately, this culture reinforces the present low occupational status of dental hygiene by way of a sub-group of hygienists that has no interest in furthering the professional project of dental hygiene.

An important issue related to the findings on dental hygiene education and the professional project is the location of training. In the neo-Weberian tradition, Freidson’s (1994) conception of professions emphasizes the importance of the linkages between tasks, advanced training, and markets. This view presupposes that institutions of higher education, namely universities, are above all the repositories of expert and specialized knowledge. Study participants were not consistent in their perceptions of the influence of the current system of dental hygiene education on the professional project. Many felt that the length and type of training should be consistent, but did not suggest that university programs were more appropriate locations for dental hygiene programs than community college sites. Others indicated that degree education was important to dental hygiene’s professional development, but did not imply that it must necessarily be the standard for entry to practice. At present, most dental hygienists are prepared in two year programs in
community college settings. The perceptions of many participants concerning the development of dental hygienists' expert knowledge fall short of a neo-Weberian theoretical perspective of education and its relationship to the creation of a market for expert services. What may be suggested here is that the current model of dental hygiene education in Canada, which is not consistent across jurisdictions, may be limiting dental hygiene's ability to be recognized for having an advanced and legitimate body of knowledge, that is needed to establish a distinct market for its services. Also, as suggested by study participants, variations in program length and shortened socialization periods may contribute to the creation of a sub-divided culture (professionals/technicians) in the graduate population of dental hygienists. Ultimately, this may have a negative impact on the collective actions of dental hygiene's professional project.

Theoretical and Methodological Insights

Recent literature on professions has turned to the study of 'professional projects'. Some of these studies continue to focus on traditional theories of professions, others embrace more contemporary concepts, and yet others draw on both (Bullough, 1995; Cant & Sharma, 1996; Keogh, 1997; Parkin, 1995; Freidson, 1994; Macdonald, 1995; Walby & Greenwell; Dent & Burtney, 1997). The analytical framework for these studies encompasses a variety of approaches including research that examines historical contexts, the construction of knowledge and its relationship to claims for legitimacy, authority and status in the health care market, attribute theory, the relevance of autonomy, and the social, political, and cultural context of occupations.

Contemporary paradigms of the system of professions have increased our explanatory and analytical powers to contemplate the question of professional transformation. Conflict perspectives informed by neo-Marxist and neo-Weberian theories have forced scholars to consider history and structure, class and economic determinants of
professionalism. Modern critiques have placed the development and growth of professions within the context of broader societal factors and events. More recently, theorists have recognized the relevance of gender politics, postmodernism, and discourse analysis in relation to the study of professions and professional projects, particularly those of female occupations.

Professions, in contrast to occupations, have a position of dominance in the division of labor, are not limited in their work, and have authority to control and direct the practice of others; usually subordinates. In the case of dental hygiene, hygienists are dependent on dentists to carry out their work. Generally, the services they provide assist rather than replace the tasks of diagnosis and treatment assigned to dentists (Freidson, 1970; Abbott, 1988). Powers (political, social, economic, legal) and the capability to co-opt the support of the state have sustained professional hegemony. Power is realized through ideology and knowledge. Professions possess ideologies which are coherent and sophisticated ways of thinking and feeling.

The complexities of the structure and organization of professions and their relations to broader societal contexts prevent us from being certain or making predictions about the fate of various occupational groups. The findings of the study have documented evidence of the increasing professionalism of the occupation of dental hygiene. Successful endeavors include for example, self-regulation in some jurisdictions, degree level education, and independent practice in one province. However, in spite of these facts, dental hygiene remains an occupation with the status of semi-profession. In the absence of public demand for dental hygiene services or an established jurisdiction, lack of widespread control over work, subordination to dentistry and controlling patriarchal practices, dental hygiene is not likely to attain full professional status, but may obtain a measure of independence and occupational autonomy as modern day professionals. Dental hygiene may move from a marginalized occupation to a place of enhanced legitimacy. Perhaps until
patriarchal structures in society and gendered notions of professions are altered in favor of women, professional male domination will prevail.

The present study has contributed to the literature on professions in a number of ways. First, it has examined one of the least researched health occupations, that of dental hygiene. Second, rather than relying on a single theoretical framework, multiple approaches were employed as a means of explaining both individual and structural issues pertaining to the culture and occupational status of dental hygiene. Third, this research has presented significant insights and information regarding dental hygiene in Canada. It is suggested that future research on the topic of dental hygiene professionalization utilize theoretical perspectives that allow for the study and analysis of the unique features of this occupation such as gender, its position in the division of labour, and its movement within a patriarchal society.

The qualitative design of this study allowed the researcher to explore the topic and to document the perceptions of the participants as a first step in conceptualizing the culture and status of the dental hygiene occupation. The findings of this research have provided a basis for a future study involving a larger sample of dental hygienists. A random sample of hygienists using quantitative methods may provide further empirical evidence of the culture and status of dental hygiene. As previously noted this researcher has been involved in the profession of dental hygiene for over 20 years in practice, in education and administration. Consequently, this study was undertaken with in-depth knowledge of all sectors of the occupation. Despite this insider knowledge, some of the information and experiences shared by the participants about the segmentation of the dental hygiene culture was unexpected and unknown. As such, some of the insights presented in this dissertation are truly inductive in nature.
Implications of the Study for Dental Hygiene

This study has provided a framework for beginning to understand the occupation of dental hygiene from the perspective of its own members. The findings of this research point to several areas for further consideration. Generally, data analysis revealed that participants have concerns about various aspects of dental hygiene practice and education, and the culture itself. At the same time, they have identified areas for discussion and development.

In their description of dental hygiene practice, participants spoke about the disparity between the educational preparation of dental hygienists and what is learned about dental hygiene practice and the clinical role, and the realities of practice in the private practice dental office setting. In school, dental hygiene students learn to develop critical thinking and independent decision making skills concerning the care of clients. However, based on the perceptions of participants, dental hygienists in practice are often guided or directed by dentists. They are made to feel unskilled and unprofessional; they may lose confidence in their special expertise and their self-esteem may be damaged over time. Their learned and internalized professional values and ethics are often challenged. Ultimately, these realities impact negatively on individual hygienists and on the status of the occupation as a whole. Dental hygiene educators and representatives of organized dental hygiene should examine this issue and look for ways to bridge or resolve the lack of congruence between advances in dental hygiene education and the realities of work settings that are not supportive of a professional role for the dental hygienist. Further, the leadership in dental hygiene at the provincial and national levels should continue to use the political process to promote changes in the regulation of dental hygienists through legislation that would result in greater powers for hygienists over the control of their work.

The narratives of participants concerning dental hygiene practice also pointed to the “isolation” that many practitioners feel in their day-to-day work lives. Here, there may be a
role for local, provincial or national dental hygiene professional associations to play in creating ways in which individual dental hygienists can interact and network on a regular basis, outside of participation in conferences held periodically. Participants identified the lack of a coherent sense of a professional identity amongst members of the dental hygiene community. The development of strategies aimed at reducing the issue of “isolation” would also facilitate a greater “sense of belonging to the larger group” for many practicing hygienists.

A significant finding of the study was the revelation that dental hygiene appears to be a sub-divided culture consisting of two types of dental hygienists: professional and technical. Several participants called for dental hygiene educators to examine this issue closely in terms of the current model(s) of dental hygiene education with respect to admission requirements, length of program, model of dental hygiene practice, program type (diploma/degree) and the critical role of faculty in preparing recruits for advances in practice, work settings, and dental hygienists’ professional development. Dental hygienists in the study suggested that students in dental hygiene have to be “taught to stand up to” dentist employers who challenge dental hygiene practices and professional conduct. It is interesting to note here that although participants identified a shift from educators to organized dental hygiene as a ‘major player’ in the professional project of dental hygiene, they frequently return to the community of educators for direction and assistance.

A final comment on the implications of the study pertains to the importance of continued research in dental hygiene - research that will inform the practice of dental hygiene, contribute to a critical understanding of the social, cultural and professional lives of dental hygienists, the connection between education and practice and the relationship between gender, patriarchy, dentistry and the underpinnings of the occupation of dental hygiene. This research has documented the need for dental hygiene to continue to record, examine and analyze its professional journey from the “inside” and the “outside”.

Recommendations for Future Research

This study was undertaken in order to conceptualize the culture of dental hygiene and to explore the connection between an occupational culture and its professional project. The findings in this research are based on the perceptions of the dental hygienists and dental hygiene students who participated in the study. Representatives of the occupation under study were chosen as a first systematic step in examining dental hygiene initially from the perspective of its own membership. Their perceptions and lived experiences have contributed to this analysis of dental hygiene. In order to extend this analysis it is recommended that future research consider these study findings in light of the perceptions of other persons and groups associated with dental hygiene, for example, dentistry and government officials.

A recurring topic in the study that is documented in the discussion of two of the major themes, Development and Profile of Dental Hygiene and Dimensions of the Professional Project of Dental Hygiene is participants' perception that public awareness and recognition of dental hygienists and their services is minimal. Research should be undertaken with members of the Canadian public to determine their levels of awareness, their views concerning the value of dental hygiene services, and their preferences concerning the delivery of preventive and therapeutic oral hygiene services.

The study sample was comprised primarily of key informants, that is, managers/leaders, educators and community health practitioners, and a smaller number of non-key informants (private practice practitioners). An unexpected finding in this research was that participants perceive that the culture of dental hygiene is segmented by hygienists who view themselves as professionals, and those who view themselves strictly as technicians. These technicians were identified by participants as “grass roots” hygienists. In future research on dental hygiene professionalization, this sub-divided culture should be
studied further to obtain a greater understanding of what determines membership in the group described here as technicians.

The notion of 'gender' has dominated the discussion of the study findings. Participants described the far-reaching impact of interprofessional relationships between male dentists and female dental hygienists on dental hygiene education and practice, the historical development of the occupation, the development of the 'professional self', and on the professionalization of dental hygiene. Although the proportion of male dental hygienists is very small compared with a predominance of female hygienists, it is important to understand the experiences and perceptions of male members of the occupation. Similar research should be undertaken with male representatives of the constituent groups in dental hygiene to add to our understanding of gender relations in this occupation. In a similar vein, a study devoted to a feminist analysis of the findings in this research is needed to fully comprehend the extent to which patriarchy and the institution of dentistry pervade every facet of dental hygiene.

Study participants repeatedly spoke of 'developing dental hygiene knowledge'. In their efforts to describe the occupation of dental hygiene as a modern-day profession, they referred to the appropriateness of 'evidence-based' research. This was understood to mean an examination of dental hygiene practices from a multitude of disciplinary perspectives, the goal of which is to establish efficacy in treatment choices. It is recommended that dental hygiene researchers be encouraged to develop studies of clinical practice in all dental hygiene work settings (private practice, community health, institutions, short-term and long-term care facilities, home care). It is important to demonstrate that dental hygiene services are effective and important within the sphere of health and wellness.

Finally, comparative studies of similarly placed occupations to dental hygiene such as nursing and occupational therapy should be conducted for the purpose of adding breadth to this analysis of dental hygiene. Particularly, the experiences and knowledge of other
female dominated occupations will assist dental hygiene in clarifying and making sense of its status and its place in health care and in society.

**Conclusion**

The occupation of dental hygiene in Canada is relatively young and virtually unstudied. In addition to one national census study of labour force behavior in dental hygienists in the late 1980's (Johnson, 1989), scattered research in dental hygiene education and practice has been undertaken over the past three decades. One other study of the perceptions of the status of dental hygiene was conducted with dental hygienists in the province of Alberta (Lautar, 1993). This study was limited by the traditional analytical framework of attribute theory.

Despite the fact that dental hygiene has acquired many of the traits normally associated with established professions, for example, self-regulation, a service ethic, practice standards, higher education, a code of ethics, and a national professional organization, it has, to this point in time, not achieved professional status. In fact, most practicing dental hygienists continue to be directed in their work and their services to the public and are subject to surveillance by dentists. However, at the occupational level, dental hygiene sees itself as a 'semi-profession' moving towards professionalism.

This study represents a first attempt to document and conceptualize the culture and occupational status of dental hygiene in Canada from the perspective of its own membership by using a qualitative research design. The findings of this study provide an initial understanding of the perceptions of dental hygienists with regard to the historical development of the occupation, self-identity, dental hygiene’s public image and cultural dimensions, the changing nature of dental hygiene, educational practices, the relevance of the interprofessional relationships between the occupations of dental hygiene and dentistry, and finally the dimensions of dental hygiene’s professional project.
Several theoretical frameworks and analytical concepts were applied in this study to interpret the findings. Symbolic interactionism is a useful framework within which a micro examination of the perceptions and experiences of individual dental hygienists can be conducted. Broader contextual issues of professionalism were explored through the macro perspective of neo-Marxist and neo-Weberian concepts, post-modernism, and feminist literature in an attempt to make sense of the culture and status of the female dominated occupation of dental hygiene.

The study of professions is reflected in an enormous body of literature and an immense amount of research on complex issues. This research has discovered that individual dental hygienists are committed to providing quality care to their clients. They search for ways to improve the delivery of care within the confines of the dental practice setting and in the face of frequent interprofessional conflict with dentists. At the occupational level, dental hygiene is pursing a professional project to increase its status and establish some level of autonomy from dentistry. In its pursuit of professionalization it is exploring its knowledge base, professional role, alternative work settings, and other opportunities to advance this project. All of this is occurring in the absence of a clear understanding of what the ‘profession of dental hygiene’ means or how it may resemble a modern-day profession. Further research is necessary to expand the current study to test the validity of the findings and refine our knowledge of dental hygiene’s culture and changing occupational status. This study has revealed the complexities of dental hygiene. It is hoped that this analysis will provide an initial understanding of the occupation’s growth and its goal of professionalization.
REFERENCES


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APPENDIX A
Glossary of Terms - Issues of Professionalism

Occupational Closure: Modes of occupational closure are "different means of mobilizing power in order to stake claims to resources and opportunities" (Witz, 1992, p.44). Occupational closure strategies used by members of professional projects include exclusion, inclusion, demarcation, and dual closure. Exclusionary and demarcationary strategies are employed by dominant professional groups in the hierarchy to achieve intra-occupational and inter-occupational control. Subordinate occupational groups utilize inclusionary and dual closure techniques in response to domination by other professions. All closure strategies are related to mechanisms of control concerning matters of entry into occupations, occupational regulation, division of labor, and monopoly of skills and knowledge (Parkin, 1979).

Division of Labor: The division of labor in professional work has two primary features; it involves a hierarchy and the domination of one group over others. Freidson (1976) describes the division of labor in health as "a process of social interaction in the course of which participants are continually engaged in attempting to define, establish, maintain and renew the tasks they perform and the relationships with others which their tasks presuppose... (since) most of the time the limits to interaction posed by consensual conceptions of 'scientific' necessity and legal propriety are sufficiently broad and permissive that a variety of bargains is possible for the participants" (p. 311).

Professional Dominance: Professional dominance in health care is enforced at three levels: dominance over a profession's own work, over the work of others, and dominance in the wider health sphere. Dominance at the first level is referred to as autonomy, which means that a profession has the exclusive right to practise, and the profession is not accountable to
other occupations. The second level denotes a relationship of authority and involves supervising and directing the work of others. At the highest level, a profession is dominant in relations between the health sector and the wider society and its members are viewed as experts on all matters pertaining to health (Willis, 1989).

Secondary Deskilling: Secondary deskilling results when certain health occupations are legally prevented from carrying out certain tasks which are deemed to be the exclusive territory of the dominant profession (Turner, 1987). For example, optometrists cannot legally diagnose ocular pathology which is the exclusive purview of ophthalmologists.

Gendered Nature of Professional Work: Neo-Marxist feminists argue that in the traditional household women cheapen the costs of labor by their domestic work. In the health care division of labor, this work is reproduced by women as they continue to function in subordinate positions in the system, primarily to reduce the costs of labor in health care. Feminist theory argues that "women are exploited as nurses because they are socialized into a doctrine which equates nursing with mothering and sees the hospital setting as an extension of the domestic sphere of labor" (Turner, 1987, p.149). Witz (1992) emphasizes the importance of demarcation closure strategies in understanding how inequitable gender relations are developed and sustained within an occupational hierarchy in the health division of labor. This author claims that the institutions of a traditional and modern patriarchal society sustain the institutionalization of male power and privilege within the health care division of labor between medicine and related occupations such as nursing.

Functional Autonomy: Functional autonomy refers to non-supervised, independent practice and the ability to sustain such practice by recruiting clients on a non-referral basis. Freidson (1970) asserts that the potential for conflict is present when health occupations
hold some degree of autonomy and the nature of their professional work overlaps with the work of a dominant profession.

**Subordination:** Subordination involves a situation in which the character and activities of an occupation are delegated by members of a dominant profession with the result that the occupation has little scope for independence, autonomy, and self-regulation. For example, nursing and mid-wifery are subordinated to medicine (Turner, 1987).

**Inter/Intra Professional Conflict:** Professional conflicts arise from matters pertaining to the regulation of occupational members, the establishment of a monopoly of skills, the establishment of jurisdictional boundaries, the nature of professional work, professional dominance and autonomy (Freidson, 1970).
APPENDIX B

Request to Participate - Dental Hygiene Manager/Leader, Educator, Practitioner in Community Health

Dear

I am a doctoral student at the University of Manitoba in an interdisciplinary program. As a part of my Ph.D. studies, I will be conducting a research study. The primary question to be addressed in this study is "What are the perceptions, beliefs, and experiences of representatives of the dental hygiene community with respect to the professionalization of dental hygiene?"

Little research has been conducted to determine and understand the complex culture of dental hygiene in relationship to its professionalization. A formal investigation of the professional views, beliefs, perceptions, experiences, and attitudes of members of the dental hygiene community has never been carried out. Using a qualitative method of inquiry, the occupation of dental hygiene will be studied in a systematic fashion in order to conceptualize the culture of dental hygiene and to understand the structure, organization, inter-occupational relationships, work roles, and socialization factors involved in dental hygiene's professionalization.

The sample chosen for this study includes dental hygienists and dental hygiene students. I have selected you as a potential participant in this study because of your experience and background in dental hygiene. As a participant in this study you will be asked to be involved in an in-person interview with myself which will last approximately one to one and one half hours. You will be asked to discuss your views, thoughts, beliefs, perceptions and experiences as a dental hygienist. This interview will be audio recorded with your consent. You may also be asked to participate in a second telephone interview which will focus on validating a concept map (a visual description on paper of your
thinking about the culture of dental hygiene) which you will receive from me prior to this interview. If during the course of the interviews you find that you do not wish to answer a particular question, you may decline to answer at any time. As well, you are free to withdraw from participating in the study at any time. Both interviews will be scheduled at your convenience.

It is important for you to understand that any information that you provide during the course of the study will be kept confidential. Only I, the members of my advisory committee, and a transcriber will have access to the tapes, notes, and transcripts of the interviews. These tapes, notes and transcripts will be identified with a code number only and your name will not appear on any of this information.

I will call you within the next week to determine your willingness to participate and to answer any questions that you may have. If you choose to participate, we will set a time and place (your city of residence) for the first interview. Prior to this interview you will be asked to sign a Consent Form (attached), indicating that you have agreed to be in the study. You will receive a copy of this form for your records.

Thank you for considering this request. I look forward to speaking with you.

Sincerely,

APPENDIX C

Consent Form - Dental Hygiene Manager/Leader, Educator, Practitioner in Community Health and Private Practice

This confirms that I, ________________________________, having met the conditions for this study, agree to participate in the study. Specifically, I understand and agree to the following:

1. The purpose of this study is to determine how dental hygienists and dental hygiene students conceptualize the professional culture of dental hygiene. Specifically, the study will attempt to elicit an understanding of the thoughts, beliefs, perceptions, and experiences held by dental hygienists about the professionalization of the dental hygiene occupation.

2. The study is being conducted by Ellen Brownstone as part of her program requirements for her doctoral degree. The members of the advisory committee include: Dr. Alexander Segall, Advisor and Dr. Karen Grant (University of Manitoba, Department of Sociology) and Dr. Wesley Pue (University of British Columbia, Faculty of Law).

3. I have received a written explanation of the study.

4. I understand that my participation in the study involves one in-person interview and possibly one other telephone interview with the principal investigator. The face-to-face interview will be audio recorded. Each interview will last approximately one to one and one half hours.
5. I understand that I may withdraw from the study at any time without penalty to me. I may refuse to answer specific questions at any time during the interview if I so desire.

6. I understand that any information I provide during the study will be kept confidential. Only the principal investigator, members of her advisory committee, and a transcriber will have access to the interview tapes, transcripts, and notes that are directly related to my participation. The tapes, transcripts, and notes will be identified by a code number only. My name will not appear on any tape, transcript, note, or in the report of the study. Only the principal investigator will know the names of those who participate in the study. Consent forms, tapes, notes, and transcripts will be kept in a locked cabinet. After seven years from the completion of this study these will be destroyed; printed matter will be shredded and tapes erased. Participants will be acknowledged for their contributions to the study as a group.

7. I understand that I do not face any risks by participating in this study as the principal investigator has no influence over my employment.

8. I understand that I will be provided with a copy of this consent form.

9. I understand that I may contact Ellen Brownstone, Principal Investigator at (204) 789-3665 (office) or (204) 475-5432 (home) at any time, if I have any questions about my participation in this study or Dr. Alexander Segall, Advisor at (204) 474-9487, or Dr. Kenneth Hughes, Dean, Faculty of Graduate Studies, University of Manitoba at (204) 474-9887.
My signature below indicates my agreement to participate in the study.

__________________________________  __________________________________
Participant                                           Researcher

__________________________________
Date

I wish to receive a summary of the results of this study.  _____   _____
Yes                                                    No

If Yes:

NAME:  ________________________________________________

ADDRESS:  ____________________________________________

_________________________________________
A STUDY OF THE PROFESSION OF DENTAL HYGIENE

WOULD YOU LIKE TO PARTICIPATE IN A STUDY OF THE
CULTURE AND PROFESSIONALIZATION OF DENTAL HYGIENE??
I'M INTERESTED IN HEARING YOUR VIEWS!

ELIGIBILITY: PART-TIME OR FULL-TIME DENTAL
HYGIENIST IN PRIVATE PRACTICE

YOUR PARTICIPATION WOULD INVOLVE AN INTERVIEW
WITH THE RESEARCHER, ELLEN BROWNSTONE

IF YOU ARE INTERESTED IN VOLUNTEERING FOR THIS STUDY
PLEASE RETURN THE BOTTOM HALF OF THIS FORM FOR MORE
INFORMATION. NOT EVERY DENTAL HYGIENIST WHO IS
INTERESTED WILL BE SELECTED FOR THE STUDY.
STUDY OF THE PROFESSION OF DENTAL HYGIENE

NAME: ____________________________________________

ADDRESS: _________________________________________

________________________________________________________________

PHONE NUMBER: (______)__________________________ (home)

(______)__________________________ (work)

PLEASE RETURN THIS FORM TO ELLEN BROWNSTONE, APT. B, 1055 DORCHESTER AVENUE, WINNIPEG, MANITOBA, R3M 0R2.
APPENDIX D
Participant Recruitment Advertisement - Dental Hygiene Student

A STUDY OF THE PROFESSION OF DENTAL HYGIENE

WOULD YOU LIKE TO PARTICIPATE IN A STUDY OF THE CULTURE AND PROFESSIONALIZATION OF DENTAL HYGIENE??
I'M INTERESTED IN HEARING YOUR VIEWS!

ELIGIBILITY: SENIOR DENTAL HYGIENE STUDENT IN A DIPLOMA PROGRAM OR STUDENT IN A DENTAL HYGIENE DEGREE PROGRAM

YOUR PARTICIPATION WOULD INVOLVE AN INTERVIEW WITH THE RESEARCHER, ELLEN BROWNSTONE

IF YOU ARE INTERESTED IN VOLUNTEERING FOR THIS STUDY PLEASE RETURN THE BOTTOM HALF OF THIS FORM FOR MORE INFORMATION. NOT EVERY INTERESTED STUDENT WILL BE SELECTED FOR THE STUDY.
STUDY OF THE PROFESSION OF DENTAL HYGIENE

NAME: ________________________________________________

ADDRESS: ____________________________________________

______________________________________________________________________

PHONE NUMBER: (______)___________________________ (home)

(______)___________________________ (work)
APPENDIX E

Invitation to Participate - Dental Hygienist in Private Practice and Dental Hygiene Diploma/Degree Student

Dear

Thank you for expressing your interest in a study of the profession of dental hygiene. I am a doctoral student at the University of Manitoba in an interdisciplinary program. As a part of my Ph.D. studies, I will be conducting a research study. The primary question to be addressed in this study is "What are the perceptions, beliefs, and experiences of representatives of the dental hygiene community with respect to the professionalization of dental hygiene?"

Little research has been conducted to determine and understand the complex culture of dental hygiene in relationship to its professionalization. A formal investigation of the professional views, beliefs, perceptions, experiences, and attitudes of members of the dental hygiene community has never been carried out. Using a qualitative method of inquiry, the occupation of dental hygiene will be studied in a systematic fashion in order to conceptualize the culture of dental hygiene and to understand the structure, organization, inter-occupational relationships, work roles, and socialization factors involved in dental hygiene's professionalization.

The sample chosen for this study includes dental hygienists and dental hygiene students. As a participant in this study you will be asked to be involved in an in-person interview with myself which will last approximately one to one and one half hours. You will be asked to discuss your views, thoughts, beliefs, perceptions and experiences as a dental hygienist. This interview will be audio recorded with your consent. You may also be asked to participate in a second telephone interview which will focus on validating a concept map (a visual description on paper of your thinking about the culture of dental
hygiene) which you will receive from me prior to this interview. If during the course of the interviews you find that you do not wish to answer a particular question, you may decline to answer at any time. As well, you are free to withdraw from participating in the study at any time. Both interviews will be scheduled at your convenience.

It is important for you to understand that any information that you provide during the course of the study will be kept confidential. Only I, the members of my advisory committee, and a transcriber will have access to the tapes, notes, and transcripts of the interviews. These tapes, notes and transcripts will be identified with a code number only and your name will not appear on any of this information.

I will call you within the next week to determine your willingness to participate and to answer any questions that you may have. If you choose to participate, we will set a time and place (your city of residence) for the first interview. Prior to this interview you will be asked to sign a Consent Form, indicating that you have agreed to be in the study. You will receive a copy of this form for your records.

Thank you for considering this request. I look forward to speaking with you.

Sincerely,

Dear

Thank you for your interest in participating in a study of the "Profession of Dental Hygiene". A random selection of participants has been made and unfortunately your name was not drawn. An article on the results of the study will be published in the Canadian Dental Hygienists Association Journal: Probe if you are interested in reading about the outcomes of this research.

Once again, thank you for taking the time to express your interest in this study.

Sincerely,

Ph.D. Student, University of Manitoba
APPENDIX G

Consent Form - Dental Hygiene Diploma Student/Dental Hygiene Degree Student

This confirms that I, ________________________________, having met the conditions for this study, agree to participate in the study. Specifically, I understand and agree to the following:

1. The purpose of this study is to determine how dental hygienists and dental hygiene students conceptualize the professional culture of dental hygiene. Specifically, the study will attempt to elicit an understanding of the thoughts, beliefs, perceptions, and experiences held by dental hygienists and dental hygiene students about the professionalization of the dental hygiene occupation.

2. The study is being conducted by Ellen Brownstone as part of her program requirements for her doctoral degree. The members of the advisory committee include: Dr. Alexander Segall, Advisor and Dr. Karen Grant (University of Manitoba, Department of Sociology, and Dr. Wesley Pue (University of British Columbia, Faculty of Law).

3. I have received a written explanation of the study.

4. I understand that my participation in the study involves one in-person group interview with the principal investigator which will be audio recorded. I may also participate in a second telephone interview. Each interview will last approximately one to one and one half hours.
5. I understand that I may withdraw from the study at any time without penalty to me. I may refuse to answer specific questions at any time during the interview if I so desire.

6. I understand that any information I provide during the study will be kept confidential. Only the principal investigator, members of her advisory committee, and a transcriber will have access to the interview tapes, transcripts, and notes that are directly related to my participation. The tapes, transcripts, and notes will be identified by a code number only. My name will not appear on any tape, transcript, note, or in the report of the study. Only the principal investigator will know the names of those who participate in the study. Consent forms, tapes, notes, and transcripts will be kept in a locked cabinet. After seven years from the completion of this study these will be destroyed; printed matter will be shredded and tapes erased. Participants will be acknowledged for their contributions to the study as a group.

7. I understand that I do not face any risks by participating in this study as the principal investigator has no influence over my educational program in dental hygiene.

8. I understand that I will be provided with a copy of this consent form.

9. I understand that I may contact Ellen Brownstone, Principal Investigator at (204) 789-3665 (office) or (204) 475-5432 (home) at any time, if I have any questions about my participation in this study or Dr. Alexander Segall, Advisor at (204) 474-9487, or Dr. Kenneth Hughes, Dean, Faculty of Graduate Studies, University of Manitoba at (204) 474-9887.
My signature below indicates my agreement to participate in the study.

________________________________________  ______________________________
Participant                                      Researcher

________________________________________
Date

I wish to receive a summary of the results of this study.  _______  _______
Yes  No

If Yes:

NAME:  _______________________________________

ADDRESS:  ___________________________________

________________________________________

________________________________________
APPENDIX H
Interview Guide - Core Questions

1. What is your image of a dental hygienist?

2. How do you perceive the professional role of the dental hygienist?

3. Did (or has) your dental hygiene education contributed to your self-concept of a dental hygienist? What specific factors or people in your program helped you develop a professional identity? How?

4. What ideas and objectives do you think are characteristic of the culture of dental hygiene? What values guide dental hygiene as an occupational group?

5. When you think about dental hygiene gaining professional status, what does that mean to you?

6. What are 3 things that dental hygiene has to do in order to achieve its professional goals? What about individual dental hygiene practitioners, or educators, or others?

7. In your opinion who has been involved in dental hygiene's professionalization, and why?

8. What do you believe, if anything, will prevent dental hygiene from having full professional status? Why?

9. What makes dental hygiene a distinct and unique occupation?
10. Dental hygiene has been criticized for not having its own body of knowledge/research and hence has not earned true professional status. Do you agree? Why? Why not?

11. In your opinion, will dental hygiene self-regulation and independent practice result in professionalization? Why? Why not?

12. Can you describe your view or understanding of the relationship between dental hygiene and dentistry in the dental division of labor? What is it based on?

13. Do you think that dental hygiene will ever gain autonomy from dentistry? How?

14. How would you describe the professional relationship and roles between dentists and dental hygienists? Should occupational boundaries remain as they are and why?

15. Does organized dentistry have power over organized dental hygiene? How? Do dentists control dental hygienists in the work setting? How?


17. Does the fact that dental hygiene is predominantly female affect the occupation's professionalism? Why?

18. What do you see as dental hygiene's future?
Additional Questions For Sample Sub-Groups

Dental Hygienists

1. Can you tell me about your own experience or involvement in transforming dental hygiene from a semi-profession to a profession?

2. Having discussed what you believe to be the ideas and values of the dental hygiene profession, are these put into practice in the "real work world" of dental hygienists? Why? Why not?

3. Can you tell me whether you are personally or professionally involved in activities or organizations outside of your work environment which you feel contribute to dental hygiene's growth and development?

4. How do you feel when you hear a dentist call a dental hygienist the "girl in the office"? Why?

5. In your opinion is the current model of dental hygiene education in Canada appropriate? Why? Why not? Please explain. (educators only)

6. Do you feel that today's graduates in dental hygiene are adequately prepared to meet the challenges of practice? Please explain (educators only)
Students

1. When did you actually decide on dental hygiene as a career? Why?

2. Please name 3 issues of importance to the dental hygiene occupation?

3. How do you envision yourself practising dental hygiene 10 years from now?
APPENDIX I

Analyzed Documents

(a) Dental Hygiene: Definition and Scope - Draft (CDHA, 1994c)
(b) Education Standards - Draft (CDHA, 1994d)
(c) Canadian Dental Hygienists Association Code of Ethics (CDHA, 1992a)
(d) Canadian Dental Hygienists Association Constitution/L'Association Canadienne des Hygienistes Dentaires and Bylaws (CDHA, 1992b)
(e) Management of Dental Hygiene Care Position Statement (CDHA, 1992c)
(f) “Dental Hygienists Regulation” (College of Dental Hygienists of British Columbia, 1994)
(g) Regulation No. 7 - Dental Hygienists, Sections 6.2, 6.3 (Nova Scotia Provincial Dental Board, 1992)
(h) Canadian Dental Hygienists Association Mission/Vision Statement - Draft (CDHA, 1995a)
APPENDIX J

CONCEPT MAPS OF STUDY PARTICIPANTS
CONCEPT MAP - PARTICIPANT 2
COMMUNITY HEALTH PRACTITIONER

CONCEPTUALIZATION OF DENTAL HYGIENE

PRESENT

. Attributes of Dental Hygiene/Dental Hygienists
  - practice standards
  - ethics
  - "caring" practitioners
  - prevention oriented
  - emphasis on communication

. Professional Role
  - inter-relationships with nurses, members of dental community and other health professionals

. Distinct from dentistry re: promotion and "people" skills

. Ways of defining dental hygienist re: licensure in Ontario

. Aspects of "own" development of professional identity:
  - self-image
  - visibility in community - church, professional dental hygiene organizations

FUTURE

. Expanded Practice - diagnosis, independent decision-making, community practice, outreach

. Increased inter-professional collaboration
DEVELOPMENT OF DENTAL HYGIENE

INDIVIDUAL LEVEL (DENTAL HYGIENIST)

. Dental hygiene student experiences - university traditions and role modeling, socialization
. Different than dentists - people oriented and focus on promotion versus cure
. In the past mostly women; in the future will be gender neutral
. Self development - internalize professional identity over time
. Importance of mentors

OCCUPATIONAL LEVEL (DENTAL HYGIENE)

. In Ontario, in past limited to women - shaped by dentistry as "womens’ work"
  - gender discrimination and subordination
. CDHA has had strong role in developing occupation and national identity
. Distinct from dentistry re: roles - prevention/promotion and client centred versus treatment
. Occupational relationship with dentistry greatly influenced by gender issues and hierarchical structure
. In the future greater autonomy for dental hygiene related to government support and health care reform

DENTAL HYGIENE PROFESSIONALISM

INDIVIDUAL

. Caring, interpersonal skills, making independent decisions, providing full range of dental hygiene services, independent practice (one aspect, but not only aspect)
. Internalization of professional role
OCCUPATION

. Developing inter-professional relationships
. Dental hygiene professionalism
  - Sociological Factors - independence, self-regulation, practice standards, ethics, continuing education
  - Professional Factors - distinct body of knowledge, emerging profession
. Future - Working in community centres, shift in roles and work settings
. Visibility in community
. Need dental hygiene leaders/advocates

RELATIONSHIP WITH DENTISTRY

. In Ontario, professional conflict re: economics, status, control, domination, roles
. Subordination to dentistry
. Gendered aspects of relationship - male dominance at individual and occupational levels
. Economic exploitation of dental hygienists
. Hierarchical at practice level
. Future - challenged by government initiatives re: health care delivery
. Dentists control ways in which hygienists practice
. "De-skilling" by dentistry - limiting scope of practice
. Increase in number of men entering dental hygiene may alter relationship and working conditions
. Historically a patriarchal relationship - still ongoing
. Dental hygiene established as "womens' work"

ENABLERS

. Role of CDHA
. **Self-regulation - most important**
. **Government support (such as in Ontario)**
. **Dental hygiene leadership**
. **Developing body of knowledge distinct from dentistry**
. **Movement from dependence to interdependence with dentistry**
. **Increase dental hygiene education level as basis for professional role**
. **Independent practice as an element of professionalization**
. **Increase education program length allow for professional socialization (Ontario)**
. **Dental hygiene positioned well in health care reform - cost-effective preventive care**
. **Public persuasion**

**BARRIERS**

. Organized dentistry and individual dentists - control, dominance, have political clout
. Gendered nature of relationships between dentistry and dental hygiene
. Current working arrangements for hygienists under dentistry
. Structure of 3rd party insurance and provincial fee guides influence dental hygiene practice
. "De-skilling" by dentistry (limit scope of dental hygiene practice)

**DENTAL HYGIENE EDUCATION**

**PAST**

. **Factors in Learning Dental Hygiene**
  - importance of "traditional" university programs and a student's development of a professional self-concept
  - own American student experiences re: exposure to professional dental hygiene organizations
- combined classes with dental students - interaction not permitted, segregated clinics
- exposure to community dental hygiene and other dental hygiene roles
- importance of theoretical scientific base to practice
- control over student dress and appearance re: professional role

PRESENT
- Current model in Ontario inadequate to prepare "professional hygienist"
- Present model had changed from longer program length prior to 1970's

FUTURE
- Need to increase program length in Ontario re: development of decision-making skills and expansion of dental hygiene role (1 year pre-requisites and 2 years dental hygiene foundation)
- Movement towards degree as entry level - related to professional status of dental hygiene
- Graduate education important for dental hygiene occupation to have
Concept Map - Participant 5

Dimensions of Professional Project

Limitations
Features of Professionalism
Enablers

Dental Hygiene in Transition

Dental Hygiene Education
Identity of Dental Hygiene

Individual
Occupation
CONCEPT MAP - PARTICIPANT 5
DIPLOMA EDUCATOR

DENTAL HYGIENE IN TRANSITION

- Evolving role of dental hygiene in communication, promotion, public health, multidisciplinary care, home care
- Emerging profession - related to developing theory
- Changes in regulation will not lead to complete autonomy from dentistry
- Working arrangements altering - increase in dental hygiene independent contracting
- Employment setting options should be available in future (e.g.) independent practice, community health centres
- Public awareness of dental hygiene role improving - perception of differences in dentist and dental hygienist skill level re: periodontal care
- Current and future qualities/traits of dental hygiene recruits may alter dental hygiene roles and practice (recruits have increasingly stronger and broader backgrounds)

DIMENSIONS OF PROFESSIONAL PROJECT

FEATURES OF PROFESSIONALIZATION

- Expanded employment opportunities re: work settings (community health centres)
- Primary health care providers - shift from dependence to independence
- Most important is that the establishment of a profession comes from external recognition - other professions and the public
- More professional development - distance education (Ontario)
- Individual intrinsic belief in life-long learning
- Hygienists with diplomas and hygienists with degrees/advanced degrees
A "collective" effort of students, educators, practitioners and leaders

- Positive intra-professional relationships between hygienists important to professionalism

ENABlers

- Legislative framework to allow for expanded work settings
- Dental hygiene research development - more scientific, less empirical
- 100% membership in ODHA
- CDHA has ongoing focus on professionalization
- Parallel between feminist movement and dental hygiene professionalization
- Self-regulation critical
- Leaders in dental hygiene give occupation direction
- Advocacy groups (e.g.) DHEAO

LIMITATIONS

- Restrictive regulation of dental hygiene (Ontario)
- Subordination by dentistry - “auxiliary” role
- Dependent role forced on dental hygienists by dentists
- Gender issues between dentists and dental hygienists - control, supervision, dependence at individual level and “old boys” network at organized level (ODA & CDA)

- 3rd party coverage factors re: preventive services will limit dental hygiene practice

DENTAL HYGIENE EDUCATION

- Teaching "individualized care"
- Integrate non dental hygiene theory to expand dental hygiene theory base
- Should encourage professional membership through programs
. Development of advanced dental hygiene education and relationship to expanded roles (e.g.) research
. Professional socialization of students is important role for educators
. Adequate in Ontario in diploma programs
. Shift from homogeneous student population to recruits with diverse backgrounds

IDENTITY OF DENTAL HYGIENE

INDIVIDUAL (DENTAL HYGIENISTS)
. Characteristics: people oriented, prevention focus, "caring", embrace change, altruistic
. Learning dental hygiene and development of self-concept
  - influence of role models
  - professional socialization

OCCUPATION (INCLUDES PROFESSIONAL ASSOCIATIONS AND LICENCING AUTHORITY)
. Guided by practice standards and quality assurance
. Development of "dental hygiene diagnosis"
. Scientific basis for practice - much borrowed from other fields
. Relationship with dentistry

Past
  - dental hygiene had auxiliary status
  - gender requirements for dental hygienists legislated (Ontario)

Present
  - many hygienists have "control" over prevention practices in dental office
  - organized dentistry dominates organized dental hygiene
- individual dentists who control hygienist practice - consequences of this control
  are professional, personal, and ethical
- dental hygiene has become more assertive as "women" have become more assertive

**Future**
- may be more collaborative at organized and individual levels as dental hygiene moves into community settings, will gain autonomy