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Promoting Careers in Dental Hygiene: The Dental Hygienist's Role

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PROMOTING CAREERS IN DENTAL HYGIENE:

THE DENTAL HYGIENIST'S ROLE

by

**Taline Dadian
B.S., May 1978, Loyola University**

**A Thesis Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirements for the Degree of**

MASTER OF SCIENCE

DENTAL HYGIENE

OLD DOMINION UNIVERSITY

May, 1991

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ABSTRACT

PROMOTING CAREERS IN DENTAL HYGIENE:

THE DENTAL HYGIENIST'S ROLE

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The purpose of this study was to investigate whether practicing dental hygienists promote their profession as a desirable career. A self-designed, 48 item questionnaire, Dental Hygienists' Participation in Career Recruitment, was mailed to a random sample of 600 dental hygienists residing in the Commonwealth of Virginia. Data were obtained from 393 dental hygienists for a 65.5 percent response rate. Responses from each item were analyzed by frequency distributions, percentages and chi-square test for independence at a 0.05 level of confidence. The factors determined to influence dental hygienists' decisions towards promoting careers in dental hygiene included the perceived image of the dental hygiene profession, the degree of career and job satisfaction, the influence of market supply/demand for dental hygienists and the impact of professional affiliation. Career and job satisfaction was found to be the most influential factor in dental hygienists' decisions towards promoting their profession.

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CHAPTER 1

Introduction

Dental hygiene practitioners are in an ideal position to promote their profession (Tussing 20; Zarkowski 48). Practitioners have been effective marketing agents for dentists by promoting dental services (Singer Marketing 410). Through their direct contact with the public, practitioners are viable marketing agents for encouragement or discouragement of potential applicants to dental hygiene programs (Tussing 20; Zarkowski 36). There is minimal documentation examining dental hygienists' use of this potential to promote careers in dental hygiene.

Currently, dental hygiene programs are witnessing a steady decline in applicants (Idaho State University 2; Goral 12-21; Settimi 28-33; Solomon and Gray 537-9). Recent societal trends have caused concern for the future existence of the dental hygiene profession. The ever decreasing college population combined with the fear of contracting infectious diseases have contributed to the dissuasion of potential candidates from selecting health related careers (Institute of Medicine 1). The attrition of dental hygiene practitioners from clinical practice has created concern that the supply of dental hygienists will not meet the demand for professional dental hygiene care. (ADHA Re-entry 7; Sodano and Javian Attrition 562; Solomon and Gray 539). With the increased

demand for dental hygienists, dentistry is presently reliving the 1960s, during which the number of available dental hygienists was limited (Woodall Deja Vu 12). Employer-sponsored training, referred to as "preceptorship", may become legalized if inadequate supplies of dental hygienists persist (AADS Preceptorship 45; Goldberg 45; Sargent 27). Because of these significant trends, dental hygienists need to be actively involved in promoting their profession as a promising career.

Career satisfaction can be defined as contentment with one's profession. Satisfied clinicians are the best spokespersons for recruitment (Fenner and Fenner 3-3). Although previous researchers cite an overall satisfaction among dental hygienists with their present job and chosen career (Body 170), attrition levels of practitioners from clinical practice suggest otherwise (ADHA Re-entry 7; Sodano and Javian Attrition 562). Dental hygienists often leave clinical practice because of inadequate salaries, poor work conditions and job security (7). Several authors contend that state and dental regulations imposed on dental hygiene practice restrict dental hygiene services (Darby and Schwartz 271; Rose-Sutton 166). These regulations may perpetuate frustration and dissonance among dental hygienists, deter practitioners from promoting dental hygiene as a desirable career, and influence their decision to leave clinical practice (166).

Professional affiliation exemplifies interest and support in the welfare and development of a profession (Lamb-Mechanick and Block 398). Only one-third of all dental hygienists are members of the American Dental Hygienists' Association (ADHA) (Kvix ADHA 274). The primary reason for nonmembership is high membership fees (274). Apparently, dental hygienists perceive that membership fees exceed the altruistic benefits of supporting their profession.

The dental hygiene profession is seeking public awareness, national recognition and an identifiable image (Albrecht 12; Rose-Sutton 166; Woodall Goals 9). Recognition begins with identification. Outside the profession, the terms, "dental hygiene" and "dental hygienist" remain unknown, unclear, and unidentifiable" (Albrecht 12-8; Aschcroft 24-27; Boyer 17-22; Miller 34-9; Woodall Expectations 10). The history of dental hygiene recounts why these terms have remained unfamiliar.

A relatively new concept in health care, the use of marketing provides health professions with strategies for achieving recognition. Marketing consists of meeting consumer needs in the most efficient and profitable manner (Kotler and Bloom 4). Applying marketing principles to dental hygiene recruitment has several benefits. Marketing enhances the profession's image and fosters the fundamental need for dental hygiene services. Marketing principles require one to remain current with societal needs, wants and preferences (Fenner and

Fenner 3-4). Marketing also quantifies the need for dental hygienists by revealing market demand (3-4). One aspect of marketing, promotion, is a simple and effective means of arousing public interest in dental hygiene as a desirable and attractive career possibility. This investigation examined whether dental hygienists are promoting career possibilities in dental hygiene.

Statement of the Problem

The research question examined in this investigation was: Do dental hygiene practitioners promote their profession as a desirable career?

An examination of the possible contributing factors influencing dental hygienists to promote their profession were as follows:

1. Does the "image" of the profession of dental hygiene influence dental hygienists' promotional efforts?
2. Does career satisfaction or dissatisfaction influence the practitioners' attitudes toward promoting their profession?
3. Does the market supply/demand trend for dental hygienists influence the dental hygienists' attitudes towards promoting a career in dental hygiene?
4. What is the degree of responsibility perceived by dental hygienists towards promoting the profession?

5. Does professional affiliation with the American Dental Hygienists' Association influence the dental hygienists' attitude towards promoting dental hygiene as a desirable career?.

Significance of the Problem

While the demand for licensed dental hygienists has increased, many dental hygiene programs are struggling to fill classes (Settimi 28). Changing societal trends are influencing this condition (American Council on Education 1-28). The diminishing college-age population has created stiff competition among disciplines for applicants (1-28). An increasing number of women are entering traditionally male dominated fields (1-28). Lucrative and challenging disciplines such as business, computer science, law, engineering, and medicine are attracting women (1-28; Stelluto and Klein 40-41). With the risk of contracting infectious diseases (AIDS, herpes, hepatitis), soaring malpractice rates, and increasing malpractice litigation, health professions have lost their appeal as fulfilling, attractive and exciting careers (1-28; MacDonald 212). The departure of many dental hygiene practitioners from clinical practice because of inadequate salaries, work conditions, job security, and lack of employee respect have contributed to the decreasing supply of dental hygienists (ADHA Re-entry 52). Employer-training of dental hygienists, known as preceptorship, is thought to

increase the number of dental hygienists in the market place (Curran and Darby 290). However, many feel this would decrease the quality of education dental hygienists require and the public deserves (290). Legalized preceptorship does not require dental hygienists to graduate from a program accredited by the Commission on Dental Accreditation (CODA). Therefore, with the threat of legalized preceptorship, promoting dental hygiene as a professional career to qualified students will be decreased. All of these factors jeopardize the future of the dental hygiene profession.

Recognizing the serious implications of these events, the American Dental Hygienists' Association (ADHA) along with dental hygiene educators are taking steps to rectify this situation (ADHA: Prospectus 1-45). The ADHA is employing marketing principles to promote dental hygiene as an appealing profession and to enhance the image of dental hygiene (ADHA Designing ix). Additionally, dental hygiene educators have conceptualized future dental hygienists as "oral hygiene specialists", having expertise in communication, critical problem solving, assessment, evaluation, and financial and business capabilities (ADHA Prospectus 1-45).

Dental hygiene practitioners can be influential spokespersons and recruiters for the profession based upon their direct involvement with the public, dental community, and other health professionals (Tussing 16; Zarkowski 36). "The best marketers are seen as those knowledgeable about the

offerings" (Kotler and Andreasen 49). Practicing dental hygienists are best qualified to promote careers in dental hygiene. There is no documentation citing dental hygienists' participation in promoting dental hygiene as a desirable career.

To promote effectively careers in dental hygiene, it is important to have a clear understanding of what is being promoted. Promotion involves arousing interest and convinces a prospective candidate that choosing a career in dental hygiene is not only appealing but desirable. Fundamental principles of marketing indicate promotion of a product or service involves assessing how the product or service is perceived (Kotler and Bloom 87). To determine whether dental hygienists are promoting dental hygiene as desirable career, it is necessary to discover how dental hygienists perceive their profession and if these perceptions influence or contribute to their decision to promote the profession.

This investigation examined whether dental hygienists promote dental hygiene careers to interested candidates. Also explored, were influential factors which may have contributed to dental hygienists' attitudes towards promoting careers in dental hygiene.

Definitions of Terms

For purposes of this investigation, the following terms were defined:

1. Attitude. The state of mind, opinion, and feeling that dental hygienists have towards promoting their profession as an appealing career. A self-designed questionnaire entitled Dental Hygienists' Participation in Career Recruitment was used to determine dental hygienists' attitudes towards promoting their profession.

2. Attitudinal Statements. The 35 survey statements located in Part 1 of the Dental Hygienists' Participation in Career Recruitment questionnaire. These statements were designed to correspond to the influential factors which contributed to dental hygienists' decision to promote dental hygiene as a desirable career.

3. Career satisfaction. The degree of contentment and gratification experienced by dental hygienists with dental hygiene as their career choice.

4. Dental hygiene career recruitment. Dental hygienists who promote and encourage prospective candidates to seek dental hygiene as a career.

5. Dental hygiene image. The mental representation of the profession of dental hygiene by licensed dental hygienists, dentists, other health professionals, dental consumers and "prospective dental hygienists".

6. Dental hygiene manpower. The market supply and demand of dental hygienists.

7. Dental hygiene practitioner. A licensed oral health professional, primarily employed in a dental office whose

responsibilities include performing preventive, educational, and therapeutic oral hygiene services.

8. Influential factors. The five variables that contributed to dental hygienists' decision to promote dental hygiene as a desirable career. These factors included: perceived image of dental hygiene, degree of career and job satisfaction, market supply/demand trend for dental hygienists, influence of professional affiliation and promotional and behavioral responsibilities demonstrated by the dental hygienist.

9. Marketing. A series of strategies designed to arouse the interest of prospective candidates into dental hygiene programs, and to retain current dental hygienists in the profession.

10. Promotion. A component of marketing, involving the generation of interest to prospective candidates to select a career in dental hygiene.

11. Promotional statements. Survey items which were designed to examine the attitudes and behavioral responsibilities of dental hygienists towards promoting careers in dental hygiene.

12. Service Life Cycle. The "biological" life cycle that a product or service industry (such as dental hygiene) endures. The four stages of the life cycle are introduction, growth, maturity, and decline stages.

Assumptions

The following assumptions were made for this study:

1. By employing a questionnaire, a large geographic coverage was obtained for data collection.

2. By surveying a larger geographic area, the validity, reliability, and usability of the results were increased.

3. A random sample of 600 sufficiently represented the dental hygiene population in the Commonwealth of Virginia.

4. The Dental Hygienists' Participation in Career Recruitment survey was an appropriate instrument in measuring dental hygienists' attitudes towards promoting their profession.

5. The closed-ended questions were concise and written with clarity, assisting respondents in understanding and responding accurately.

6. Confidentiality and anonymity allowed participants to answer the questionnaire honestly and freely.

7. Quality and aesthetic appeal of the instrument encouraged respondents to complete the questionnaire.

8. The enclosed cover letter explaining the purpose and importance of completing the questionnaire inspired respondents to participate in the study.

Limitations

The following variables might have influenced the internal or external validity of the study:

1. Validity and reliability of the results were questionable as the survey was self-designed and employed for the first time. To increase survey reliability a pilot study was conducted to establish survey clarity and to avoid misinterpretation.

2. A Likert-type scale for responses may have been too restrictive for respondents. The selections may not have represented how they truly felt.

3. Respondents may have been disinterested in completing the questionnaire. This was decreased by enclosing a cover letter (See Appendices A,B,C) which explained the importance of the study.

4. Responses may have been influenced by the Hawthorne effect; the respondent's awareness of his/her participation in the investigation which may have influenced his/her response, and may have also threatened the internal validity of the survey.

Methodology

A self-designed questionnaire entitled, Dental Hygienists' Participation In Career Recruitment (See Appendix D) was utilized to determine the attitudes of dental hygienists towards promoting their profession. The survey was submitted to four Old Dominion University faculty members for feedback. The revised survey was used in a pilot study to establish reliability. Ten dental hygienists were randomly

chosen for the pilot study. The names and addresses of the dental hygienists were obtained from the Virginia Board of Dentistry's list of registered dental hygienists (June, 1990). The pilot study was administered to establish survey appropriateness and comprehension. The dental hygienists were asked to comment on the clarity of the questions. The pilot study questionnaire was then revised.

The questionnaire package was mailed to a sample population of 600 randomly selected dental hygienists from the Commonwealth of Virginia. The names and addresses were obtained from the Virginia Board of Dentistry's list of registered dental hygienists. The package included a:

1. cover letter explaining the importance of the study and subject participation,
2. copy of the questionnaire entitled Dental Hygienists' Participation In Career Recruitment,
3. stamped, pre-addressed envelope,
4. deadline of two weeks to return the questionnaire,
5. statement of assurance of anonymity and confidentiality, and
6. statement of the researcher's appreciation for the participant's time in completing the questionnaire.

Participants were informed that the questionnaire and envelope were coded for purposes of tracing nonresponses. Nonrespondents were mailed a second questionnaire.

The 48 question survey consisted of 13 demographic items and 35 attitudinal statements. The attitudinal statements employed a Likert-type semantic differential scale format. The possible responses were strongly agree, agree, undecided, disagree or strongly disagree. The Statistical Analysis System (SAS) program for computer analysis was used to examine the data. Data were examined by frequency distributions, percentages, cross tabulations and the chi-square test of independence.

CHAPTER 2

Review of the Literature

"The basic rationale for understanding attitudes hinges on the notion that attitudes will reveal something about a probable behavior" (Kahle 58). To determine whether dental hygienists promote the profession of dental hygiene, an analysis of the contributing factors influencing their attitude must be considered. The review of the literature addresses the marketing concept applied to dental hygiene, promoting the image of dental hygiene, promotion related to career satisfaction, professional affiliation, and the supply and demand of dental hygienists.

The Marketing Concept Applied to Dental Hygiene

Marketing is the process of determining the needs of a specific group and tailoring one's service or product to meet those needs (Kotler xvii). Marketing activities promote a product or service to a potential customer (Fenner and Fenner 3-3).

The service life cycle is an important concept in marketing. This concept maintains that all services will eventually decline. Marketing theory argues that decline need not be inevitable. Through modifications and anticipation of market needs and wants, a service has the ability of remaining vital.

Analyzing the concept of the service life cycle provides an insight into the evolution of the profession of dental hygiene, in terms of its career appeal. The service life cycle is defined by its four distinct stages of evolution: introduction, growth, maturation, and decline stages (Kotler and Bloom 156-63). The introductory stage is noted as the period of initiation. Growth is marked as the stage of development during which the service is either accepted or rejected by the public. Full development occurs during the maturity stage. Signs of decline or a downward slope appear when the service ceases to meet the needs and wants of a population (Kotler and Andreason 396-419; Kotler and Bloom 156-63). Dental hygiene, a service profession, has evolved through three of the four stages.

The duration of each stage depends on how the service is "diffused" (disseminated) and accepted by a population (Rogers 5). Diffusion is the process of using varying channels to communicate an innovation to individual members of society and determines the duration of each stage of the service life cycle (Rogers 5). For the profession of dental hygiene, diffusion is the process by which prospective recruits are interested in pursuing dental hygiene as a career. Rogers (10) states that individuals respond to innovations according to their unique needs, lifestyles, and interests.

In 1913, Dr. Alfred C. Fones established the profession of dental hygiene, which is dedicated to the maintenance of

oral health (Fones 1814). From its inception, diffusion of dental hygiene remained in the domain of dentistry where dental hygiene services were administered by the dental hygienist (Schwab 40; Hamilton and Hamilton 23). During its introductory years, dentistry had difficulty accepting the profitability of employing dental hygienists (Norris 19; Shulman 23; Walsh 193). Dental hygienists worked under the supervision of dentists, receiving minimal societal recognition (American Dental Assistants' Association vii, viii). Knowledge of dental hygiene services was achieved by the recommendation and guidance from the dentist (40; 23). Therefore, consumer knowledge of dental hygiene services has evolved slowly.

During the 1960s appreciation of maintaining a preventive-oriented practice influenced and convinced many dentists to employ dental hygienists. These years symbolize dental hygiene's years of growth and development (Mashioff 411). In the 1960s the dental hygiene profession witnessed an era of attractive salaries and convenient work schedules (411). Dental hygiene practice and demand for dental hygienists increased; however, dental hygiene still remained in the shadows of dentistry. The 1960s also exhibited a limited number of available dental hygienists to meet market demand. As a result of this demand, an increasing number of individuals entered newly established dental hygiene programs (Goral 12-21; Solomon and Gray 537-9).

During the 1960s, society's consciousness was raised on political, social, and moral issues. The theme of the 1960s was self-evaluation, which was particularly significant for women, as well as the revitalization of the "women's movement". As a new liberalism swept the nation, society increasingly accepted women into the workforce, which increased the number of full-time rather than part-time dental hygienists.

In the 1960s, educators communicated to dental hygiene students the importance of taking responsibility for their personal and professional development (Woodall Expectations 10). The literature reiterates the need for dental hygiene to take control of its future (Adelson 25; Albrecht 12; Allen 117; Collis 28; Schwab 40; Woodall Tomorrow 94).

"We cannot leave the future of dental hygiene to those outside the profession, to those in academic isolation, or to those in practice who are motivated only by self-gain. Responsible hygienists must take the last step, to choose the solution which best matches reality. The challenge is now and the response is overdue. We must begin with ourselves and then stimulate our leaders to act. Have the initiative to begin and the courage to speak before we have no voice and our image forever stagnates" (Collis 28).

The mid 1970s to the mid 1980s marked dental hygiene's years of maturity during which a saturated market of dental hygienists decreased the number of attractive employment possibilities and salaries (Judge and Malvitz 9-13; Mashioff 411-18). A saturated market caused difficult times for dental hygiene practitioners in securing desirable clinical positions

(Mashioff 411; McAdams 563; Schwab 40; Sodano Attrition 562).

Discouraged practitioners departed for alternate practice settings or sought other occupations (Dreyer Choices 27; Singer Settings 86-95; Sodano and Javian Attrition 562).

The 1980s brought a decrease in real wages due to high inflation rates and difficulties in finding jobs that provided adequate benefits and salaries. Though the majority of dental hygienists remained in private practice, many branched out to alternate practice settings such as industry, management, government, geriatric and penal institutions, serving as administrators, professors and ambassadors for dental practice overseas (27; 86; 562). However, many dental hygienists left the profession, seeking alternate careers with growth and opportunity (562; Woodall Expectations 10).

By the late 1980s, the profession was alerted to the decline of applicants to dental hygiene schools (Goral 12; Settimi 28; Solomon and Gray 346). Currently, events mirror the 1960s, during which dentists had difficulty finding dental hygienists (Woodall Deja Vu 12).

Consumers today are cognizant of the importance of maintaining proper oral health. Dentistry and dental hygiene have facilitated this awareness by educating the public to obtain regular oral health maintenance care and examinations (Gronroos and Masalin 18). Dental product manufacturers also have contributed to consumer dental awareness through the marketing of preventive dental care products. Dental hygiene

services, administered by a qualified dental hygienist, will therefore remain an integral consumer need.

Currently, a national market need for dental hygienists exists in the United States (AADS 2). The need has increased because of growing public awareness of the importance of maintaining proper oral health, rising real incomes, and the availability of third party payment options (2). Therefore, employment opportunities for dental hygienists have risen. Furthermore, by the year 2000, the United States Department of Health and Human Services manpower projections indicate a continued need for dental hygienists (1988).

In 1986, an estimated 47,700 licensed dental hygienists were practicing in the United States (Sixth Report on Status of Health Personnel 1988). However, a 1988 study conducted by the American Dental Hygienists' Association (ADHA) revealed that from the estimated 98,000 licensed dental hygienists in the U.S., approximately 71,540 were actively practicing (ADHA Manpower 7). The Special Committee to Study Manpower Issues, established by the American Dental Hygienists' Association, found unfilled dental hygiene positions, an increased demand for dental hygienists and a significant number of licensed yet inactive dental hygienists (ADHA Manpower 3).

The low rate of dental hygienists willing to fill available positions and the dwindling applicant pools to dental hygiene schools indicate the possible declining interest in pursuing a career in dental hygiene. Marketing theory argues

that decline need not be inevitable (Kotler 348). Marketing principles can attract new applicants into the profession and minimize the attrition levels. Marketing applications can allow the dental hygiene profession to: 1) communicate and emphasize the importance of dental hygiene services and the professional who offers those services, 2) quantify the need for skilled dental hygienists by disclosing market demand, and 3) encourage professional image building (Fenner and Fenner 3-5).

Marketing theory is a new concept for health care professionals. In the pursuit to achieve recognition, professions such as dentistry, nursing, occupational therapy, and speech pathology are implementing marketing principles. Health professions are using marketing to:

1. project a more positive image which is essential for professional growth,
2. improve the collective public image,
3. attract qualified applicants to the profession,
4. educate professionals to "market" themselves, and
5. conduct market research in order to remain competitive (Stanton and Stanton 36).

For example, dentistry's motivation for implementing marketing strategies has been two-fold: 1) to educate the public regarding the importance of proper dental care and 2) to promote dental services (Dietz 9; Ascher 61; McCann 563).

Occupational therapy is utilizing marketing principles actively to identify target markets and develop the ideal marketing mix to these markets (Jacobs 315). [Note: The marketing mix is commonly known as the four P's of marketing which are product, price, place and promotion. This mix is a marketing tool used to influence the demand for a product (Kotler and Bloom 61).]

Since the 1980s, the nursing profession has been experiencing a shortage of nurses on a nationwide scale (Miller 1987). As a result, nursing has adopted marketing to develop recruitment and retention strategies (Neathawk et al 38; Stanton and Stanton 36; Fenner and Fenner 3-5)

In one of the most successful applications of marketing principles, the American Speech-Language-Hearing Association (ASHA) has initiated a long-term commitment to national public information (ASHA 26-35). By implementing marketing principles, ASHA has identified the following strategies:

1. a large-scale general media campaign,
2. a campaign to enlist members and affiliated state associations in executing the marketing activities,
3. a campaign to educate physicians about communication disorders and ASHA members services, and
4. a campaign to help members practicing in the educational setting to inform their publics about their services (Holley 59).

Marketing theory has recently been introduced to dental hygiene to increase enrollments in dental hygiene programs.

Recruitment conferences have been conducted to discuss appropriate marketing strategies to attract new applicants and to initiate changes for better working conditions (ADHA: Designing ix). In 1987, ADHA developed a four-phase dental hygiene recruitment program (ADHA: Designing ix). The first phase was dedicated to the support and development of dental hygiene education. A poster entitled, "Innovations In Education", was sent to career guidance counselors, libraries and dental hygiene schools. A subcommittee was formed to plan recruitment activities. Since the 1987 meeting the subcommittee has evolved into the Special Committee on Career Recruitment. The 1988 conference also targeted populations for dental hygiene career recruitment by age and ethnicity. Non-traditional students, minorities and men were targeted as potential populations for career recruitment into dental hygiene. Potential recruiters were identified as dental hygiene educators, practitioners, students, alumni groups, institutional recruiters, and ADHA.

Dental hygiene educators historically have been responsible for recruiting potential applicants into dental hygiene programs. However, comprising approximately 86 percent of the profession, practitioners represent the profession to the public (Hoople 62). The practitioner creates and earns respect for dental hygiene. As primary care providers, practitioners are in an ideal position to promote the profession (Tussing 20). By direct contact with the public, dental

hygiene practitioners are influential in encouraging or discouraging potential applicants to dental hygiene programs (Hoople 62; Tussing 20; Zarkowski 36-38). "The best marketers are seen as those knowledgeable about the offering" (Kotler and Andreasen 49). Because practicing dental hygienists are the most knowledgeable about careers in dental hygiene, they would be considered ideal to promote a career in dental hygiene. "Personal selling" or "word of mouth" can be an effective marketing tool. Whether dental hygiene clinicians are using this tool to promote dental hygiene as a career remains questionable.

Marketing the Image of Dental Hygiene

One of the principles of marketing deals with the promotion of image. An image is "the sum of beliefs, ideas and impressions that a person has of an object" (Kotler and Bloom 87). Image assessment is determined by measuring how the organization is perceived by its major "publics" (87). Dental hygiene's "publics" encompass the consumer, the dentist, and other health professionals. Only a handful of individuals outside the dental hygiene profession have a clear perception of the dental hygiene image (Albrecht 12; Angevine 380; Logan 321; Rose-Sutton 166).

The image of dental hygiene originates from the socialization process (Darby and Schwartz 271). This process occurs when one develops an identity and an expectation within that

identity (Muff 238). Men are socialized to become objective, competitive, independent, strong, assertive and self-directed (238). Women are socialized in a paternalistic society. They are taught to be sensitive, nurturing, caring, self-effacing, coy, passive and dependent (240). Since its inception, dental hygiene has remained a female dominated profession occupying a subordinate role in a male dominated dental profession (Berg 6; Hamby 1237; Hamilton and Hamilton 22).

Dr. Alfred C. Fones, interested in establishing a prevention-oriented practice and providing oral prophylaxes established the dental hygiene profession in 1913 (Motley 113). Fones found that allowing his assistant to provide oral prophylaxes and oral hygiene instructions to his patients would permit him the time to devote to operative dentistry (113). Thus, Dr. Fones taught Irene Newman, his assistant, the skills necessary to perform the oral prophylaxes and the principles of oral hygiene (115). Although data as far back as 1893 cites assistants performing oral prophylaxes, Irene Newman is recognized as the first dental hygienist (114).

Before dental hygiene services could be diffused into society, dentistry had to accept the role of women as dental hygienists (Hamilton and Hamilton 23). The economic benefits of employing females, rather than males, was instrumental in this acceptance (Fones 1814). Organized dentistry eventually accepted women to perform this "routine and repetitious task" (Hamilton and Hamilton 23).

...it certainly is the consensus of professional opinion that the busy practitioner cannot give up his valuable time for this tedious, monotonous and irksome labor... In discussing this subject with prominent men, it has been generally conceded that far better results could be obtained if suitable female assistants, not graduates (dentists) were especially trained and employed for this work (Fones 1814).

Women perceived as having "smaller and more gentle hands" were appropriate for this task that did not involve heavy manual labor (1814). Because women were not perceived as income providers, they were compensated to a lesser degree than men (Hamilton and Hamilton 23). Respectable women in the early 1900s were not seen in public without a chaperon. Therefore, the presence of a woman in the dental office allowed females unrestricted access to dental services (23). Hence, dentists profited with this new market.

Berg (40) found women entering the dental hygiene profession "conventionally-oriented", and following a stereotypical female orientation. Berg's (9) study was based on assessing dental hygiene students' perception of themselves and the typical dental hygienist in regard to feminism. Berg (30) used the Feminism II Scale as the instrument of choice, measuring the dependent variable of students' perception of themselves and the "typical dental hygienist". The independent variables of age, qualitative grade point average (Q.P.A.), and educational level were assessed by using a 3x3x3 factorial research design (31). Repeated measures of analysis of variance found no statistically significant differences

between dental hygiene students' perception of themselves and students' perception of the "typical dental hygienist" (32).

Following this traditionally female orientation, dental hygiene is viewed as secondary and subordinate to dentistry (Darby and Schwartz 271; Hamby 1237). Women today who desire to portray a stronger, independent image, generally associated with male dominated professions, are avoiding traditional female occupations (Morrow 22-27).

Dental hygiene's slow progress towards autonomy results from the attitude held by many dental hygienists that they are of a lesser status than their employer-dentist (Berg 5; Darby and Schwartz 271). For a stronger, more powerful and influential image, Berg (32) suggests dental hygienists adopt a more feminist attitude and raise their consciousness concerning their personal self-image. To enhance dental hygiene's professional image, Berg (32) recommends consciousness raising incorporated within the dental hygiene curricula.

Using the Gambrill-Richey Assertion Inventory, Tolle and Allen's (318) investigation sought to determine if a course in assertiveness training could change dental hygiene students' passive behavior to assertive behavior. The inventory was administered prior and subsequent to the completion of an eight-week assertiveness training course. One-way analysis of variance statistics found significant differences in pretest and posttest scores. The results indicated that after

completion of the course, the students acquired a greater assertive demeanor. Tolle and Allen (318) advocate that including an assertiveness training course within the dental hygiene curricula will strengthen self-confidence and communication skills. Self-confident dental hygienists will portray a stronger image desired by the profession. According to the literature, raising women's consciousness and encouraging assertion will ultimately influence and enhance dental hygiene's professional self-image (Berg 32; Darby and Schwartz 271; Tolle and Allen 318).

The image of dental hygiene also is derived from measuring the "life goals" of dental hygienists (Hodges 4). Life goals are "future oriented motivated attitudes" (Hahn 1). Examples of these motivating attitudes are "feelings or inclinations, prejudices or bias, preconceived notions, ideas, fears, threats, and convictions" (1). Hodges investigated the life goals of dental hygiene students and 1974, 1975, 1976, and 1978 graduates in three different educational settings using the California Life Goals Evaluation Schedule (CLGES) (Hodges 4). This instrument is a measurement of esteem, profit, fame, power, security, leadership, social service, self-expression, and independence (Hahn 1). Hodges (4) used an ex post facto 5x3 research design, incorporating year of graduation, and educational setting as the nonmanipulated independent variables. Ten scores on the GLGES were used as the dependent variables, and age was the covariate. Hodges

(7-8) found dental hygienists scored the highest on leadership, self-expression, and security and the lowest on fame. Dental hygiene is not a profession one might enter to gain public recognition. According to Hodges (8), the reason public awareness of the career role of the dental hygienist is low because individually, dental hygienists have not been interested in achieving public recognition.

To promote the dental hygiene profession and the dental hygienist, marketing principles advocate the use of image building based on consumer needs (Kotler and Andreason 396).

Marketing is the art of creating popular awareness or comprehension of a product or service by creating appropriate images and positioning those images in appropriate places in the consumer's mind (Kotler 25).

According to social marketer, Joseph Ashcroft (24), "there is no clear connection between the symbolic representation ("RDH") and visual image (what a dental hygienist does) in the public's mind." The literature states the public has a vague image of dental hygiene and the dental hygienist (Boyer Patient 17; Dreyer Image 16; Kvix Perception 22; Miller 34; Rose-Sutton 166; Woodall Goals 9).

The biggest mistake we have made as a profession is failing to establish a clear image of ourselves for the general public and then marketing that image. We would have no recruitment problem if we had (Albrecht 12).

The public has virtually no knowledge of the thorough, arduous academic preparation, and the rigorous state licensing requirements involved in becoming a dental hygienist (Darby

and Schwartz 271; Logan 321; Rose-Sutton 166). Dental hygienists are educated to become professionals, proficient at making decisions and providing the maximum level of oral health for society (Darby and Schwartz 271; Rose-Sutton 166; Logan 321). A dental hygienist's knowledge and expertise is examined and scrutinized thoroughly on national and state levels before he/she is awarded a license to practice (Darby and Schwartz 271; Rose-Sutton 166). Due to ignorance concerning dental hygiene education, licensure, and professional status, the public rarely perceives dental hygienists in the professional capacity in which dental hygienists regard themselves (271; 166). Rose-Sutton (166) states frustration and burnout are prevalent among dental hygienists. What dental hygienists think of themselves is contrary to what the public thinks about them. Therefore, dental hygiene clinicians find themselves in an incompatible situation. Incompatibility impedes professional and personal growth which can lead to the demise of a profession (166).

Patients perceive the dental hygienist on affective behaviors. "The dental hygienist is the nurturing, compassionate, sympathetic person, the allayer of fear and pain" (Rose-Sutton 166). Boyer (Patient 17) found consumer perception of dental hygienists as "friendly", "efficient", "nice", "cheerful", "chatty", and "congenial". Boyer (17) examined how dental hygienists and their patients perceived each other. The study interviewed 46 patients attending a

dental practice consisting of three dentists, a plaque control therapist, three chairside assistants, a clinic coordinator, two receptionists and two dental hygienists. As no particular professional relationship was found between patients and dental hygienists, patients perceived dental hygienists as "tooth cleaners", rather than oral health therapists. The high turnover rate of dental hygienists in this dental practice probably created this perception. Also, as a result, the dental hygienists were unable to develop a professional trusting relationship with their patients.

Studies on consumer perception of dental hygiene and the dental hygienist verify that dental offices are the primary vehicle for disseminating knowledge and recognition of dental hygiene practice (17; Kvix 22). Kvix (22) conducted a study to determine consumer perceptions of the present and future role performed by dental hygienists, types of care received from dental hygienists, preferred provider for various types of dental care, and acceptance of an independent dental hygiene practice. Data were collected through telephone interviews of 522 households (Kvix 22). Respondents interviewed were at least 18 years of age, and having some dental knowledge (22). Kvix (22) found the majority of consumers familiar with the term dental hygienist, however, consumer knowledge of dental hygiene responsibilities were limited to that of cleaning teeth. According to Kvix (22), consumers perceive dental hygienists as competent and responsible.

Additionally, Kvix (22) found a strong acceptance of independent dental hygiene practice by young and educated consumers.

Boyer (17) also found dental hygiene competence was based on consumer perception via the dental office. Boyer's (17) study discovered patients sensitive to interpersonal relationships between the dentist and dental hygienist. When the dentist-dental hygienist relationship is built on mutual support, respect, and rapport, patients develop a trusting, positive image, and attitude towards the dental hygienist. However, if a patient finds the dental hygienist passive, lacking self-confidence, or if disharmony exists between the dentist and dental hygienist, the patient develops an inferior, unappealing image of the dental hygienist (17).

Dentists also contribute to dental hygiene's unclear image by failing to comprehend the scope of dental hygiene practice (Rose-Sutton 166). The regulation and control of dental hygiene practice by dentistry, has contributed to the slow recognition of the dental hygiene profession (Rose-Sutton 166; Darby and Schwartz 271-274). The slow recognition and acceptance of the importance of dental hygiene practice by dentistry has impeded dental hygiene's growth, professionalization and societal recognition (Darby and Schwartz 271-4; Hamilton and Hamilton 21-5). Dentists are not generally aware of the dental hygienist's role or legal responsibilities. In 1976, 500 dentists located in upstate New York were surveyed (Leske-Leverett Survey) to determine the extent to which they

understood the State Dental Hygiene Practice Act (166). Dentists were found unfamiliar with the responsibilities and services provided by the dental hygienist (166). Dentists tend to view dental hygienists as assistants, rather than co-therapists in prevention and treatment (Sharpe 8). After 78 years of existence, dental hygienists are still not recognized by many dentists as critical providers of oral health care. Walsh (196), reviewing the economic contributions of dental hygienists to the dental practice, discovered many dentists are unaware of how to fully maximize dental hygiene services. However, the literature extensively provides dentistry with information on the economic and social benefits of employing dental hygienists (Dreyer Profits 46; Walsh 193).

A study by Parker and Chan (116) rating the perceptions of physical therapists, occupational therapists, nurses, and physicians on 13 allied health professions including dental hygiene, revealed the status and prestige level of dental hygiene compared with other health professions to be the lowest. Using a hospital environment to conduct such a study could have severely limited the dental hygiene results (Allen 117). Allen (117), questioning the research design used in the study, noted dental hygienists rarely practice in hospitals. Therefore, rater knowledge of dental hygiene activities would be limited. Regardless of this limitation, findings still reveal hospital-based health professionals are

not aware of the value of dental hygiene as a health care profession.

The image of the dental hygiene profession is derived from the "job-based" rather than "career-based" orientation as well as its technically based non-professional status (Gurenlian and Scranton 456). Gurenlian and Scranton (456) suggest dental hygienists contribute to the passive image when accepting, without question, mandates imposed by dentists. "Believing that dental hygiene is a nice little job, that one can leave to raise a family and then return on a part-time basis, also explains why the professional image of dental hygiene has evolved so slowly" (456).

Like nurses, dental hygienists need to maintain a positive self-image (Kettinger and Davit 50; Morrow 22). By modeling a positive self-image to their patients, employers, colleagues, and other health professionals, dental hygienists will gain the desired image and respect they seek. The literature encourages dental hygienists to portray a positive image in their manner of dress, speech, and action (Hartel 38; Miller 34; Sharpe 8; Tolle 51). The effective use of language and articulation are powerful tools in disseminating the professional image dental hygiene wishes to portray to the public (Miller 34). The use of words like, "functions, duties, and auxiliary" to describe dental hygiene practice conveys an image of dependency, contrary to the independent and confident image dental hygiene desires. Rather, using

words as, "prevention services and oral hygiene therapist or specialist", conveys a sense of confidence and credibility (34).

Dental hygienists, like nurses, have been struggling to attain professional status (Kettinger and Davit 50; Morrow 22; Yura 10). Yura (10) states, "the image nurses hold of themselves is significantly influenced by the image held by the public and the persons significant to the nurse." Yura (10) stresses that nurses must inform the public of their dedication and responsibility towards providing quality care. A positive, strong image is attained by pursuing higher levels of education and remaining current on the latest technology. Yura (10) advocates that nothing less than a baccalaureate degree would be acceptable in maintaining professional credibility, respect from peers and the public.

According to Kraemer (117), society perceives an image of professionalism and credibility by the level of education achieved by a discipline. To attain professional credibility and status, Kraemer (117) advocates mandating the baccalaureate degree as minimum entry into the dental hygiene profession. Kraemer (117) believes image and credibility also reflect the academic credentials of an institution and the faculty of a discipline.

If dental hygienists are to assume a professional role in relation to other health professions, a closer approach to peer equivalence, mutual respect and recognition of responsibility is essential. When the majority of practitioners do not have the minimum of a baccalaureate degree and the majority

of dental hygiene educators do not have at least a master's degree let alone a doctorate, such an accomplishment is unlikely...(117)

The misconception that dental hygienists graduate with two academic years of college education has perpetuated dental hygiene's inferior professional image (Kraemer 117; Mescher 69). However, Mescher (69) revealed the "myths and facts" concerning dental hygiene education. The myths include that "dental hygiene students are academically prepared with only a high school diploma", that "dental hygiene programs are two academic years in length" and "dental hygienists are granted academic credentials consistent with their level of education." The facts reveal that the majority of dental hygienists graduate with at least three years of college and a large percentage have four years of post high school education (117). Mescher's (117) investigation found clinical dental hygienists' earnings are not commensurate with the length of their educational program.

Darby (Viewpoint 4) believes professional status is attained by the amount of research conducted by a discipline. Darby (4) maintains dental hygiene cannot rightfully claim professional standing because its work in research has been "historically weak". This nonprofessional status may be a contributing issue suppressing the image and status dental hygiene wants to attain (4). To receive professional status, dental hygienists must be united in their efforts to stan-

dardize and support research (Carr 534; Darby Research 6; Gurenlian Research 571; Kraemer 117).

Currently, dental hygiene maintains an unidentifiable image and subordinate position. Marketing contends that image creation, expansion and positioning are important for producing successful service or product awareness (Aschcroft 24-43). What is the image of the dental hygienist and where is that image positioned in the minds of the public?

"An image is a visually based mental picture of a product or service that people carry around in their heads and which they recall whenever the product's name or symbolic representation is mentioned. Dental hygienist depicts an image of one who cleans teeth" (35).

Today, dental hygienists are specialists providing an array of services, cleaning teeth is only one of the services they provide. A dental hygienist is a skilled professional in the prevention of dental diseases, by providing primary preventive treatments such as scaling and root planing, fluoride applications and preventive education. Additionally, dental hygienists are educated and trained in other clinical areas such as placing/removing temporary restorations, removing sutures, placing/removing rubber dams, and other functions (Rose-Sutton 166).

Image positioning, which is concerned with where the image is located, is just as essential (Aschcroft 41). Dental hygiene's position is located or identified closely to the dental assisting profession as well as in the shadows of dentistry (37).

"The term dental hygiene tends to create its own position in the public's mind. Dental ties it to dentist and hygiene to sanitary health practices which adds up to somebody who takes care of the sanitary side of dental care. Often the image of a dental hygiene professional is positioned behind or in the shadow of a dentist who is limited to sanitary dental care only, and not the total preventive oral health care that dental hygiene claims" (37).

A poor position and image limits the scope that the profession is trying to project (Aschcroft 37; Kotler and Bloom 156).

Dental hygiene has initiated steps to reevaluate its position by researching means of serving future societal needs (ADHA: Prospectus 32). To meet the challenges of tomorrow, dental hygiene futurists have conceptualized the following abilities for tomorrow's oral health specialist:

- abilities to communicate and negotiate with intellectual credibility and with an increased level of human understanding,

- abilities to formulate numerous alternatives for reaching varying end points,

- abilities to assess individual client or community-wide needs,

- abilities to improve measurement of oral health status,

- abilities to set up oral disease prevention and control programs,

- abilities to critique work and to evaluate care provided,

- abilities to understand health care delivery systems and the relationship of component parts of the system, such as financing, delivery modes, and quality control, and

- abilities to reshape concepts guiding dental hygiene practice when the empirical world indicates that is necessary (ADHA Prospectus 33).

Plans to redefine and clarify dental hygiene's image and position have begun. During the 1988 ADHA conference on Designing the Future: The Recruitment Connection, the following considerations were addressed:

- creating and positioning in the minds of targeted recruitment groups a standard image of dental hygiene,
- combining a symbolic and visual representation to create awareness of the existence of dental hygiene as a profession, followed by,
- expansion of the image to create uniform comprehension of its properties, function and purposes to
- enable people to make an informal decision whether or not to pursue dental hygiene as a career (26).

The conference provided information about social marketing and its relationship to dental hygiene career recruitment. Potential target populations for dental hygiene career recruitment were identified by age and ethnicity. Also described were potential recruiters that exists among dental hygiene educators, practitioners, students, alumni groups, institutional recruiters, and ADHA. As a result of this conference the subcommittee on career recruitment was charged with assessing recruitment issues and conducting needs assessment to identify existing career recruitment activities.

Marketing Related to Career Satisfaction

As service employees, dental hygienists have face-to-face contact with the public, hence, greater interpersonal

interaction with consumers (Schneider 52). As previously noted, Boyer (17) found patients sensitive to interpersonal relationships. Therefore, patients can sense dental hygienists who are happy or frustrated with their job, satisfied or dissatisfied with their career. Employee dissatisfaction has an impact on the success of an organization due to the impression left on consumers (Schneider 52). A visibly dissatisfied dental hygienist can leave a negative impression with prospective dental hygiene candidates.

Marketing maintains that the key to achieving a successful organization is for employers to first sell jobs to their employees before they try to sell their services to customers (Berry 34). Employee satisfaction is attained by utilizing internal marketing principles. These principles are based on meeting employee needs and wants. The literature maintains that employing internal marketing strategies can attract and retain the best possible employees (34). Therefore, a dental hygienist contented with his/her career selection and current job environment is likely to promote dental hygiene as a desirable career.

Since 1945, the literature cites 31 dental hygiene satisfaction studies. Career satisfaction is defined as the gratification and contentment found in one's chosen profession (Body 170). Job satisfaction relates to contentment with one's current employment (170). Body's (170) review of the dental hygiene job and career satisfaction literature from

1978 and 1988 found, "the overall level of satisfaction with dental hygiene as a career and with current employment is high".

Boyer's (Job 235) review of dental hygiene job satisfaction literature since 1945, found the majority of research used one or two global measures of satisfaction. Global measures determine the overall degree of job satisfaction expressed by employees (235). Dimensional measures of satisfaction, which assesses multiple-items to estimate satisfaction, were used in only a few studies (235). Boyer's (235) review found that 70 percent to 99 percent of dental hygienists are satisfied with their jobs.

Sodano and Javian (Attrition 562) researching the rate of attrition from dental hygiene, discovered dental hygienists perceive their profession as a long-term career rather than a temporary job. Data gathered from the Job Diagnostic Survey revealed that dental hygienists were "generally satisfied with their jobs" (562). Job dissatisfaction which resulted in unemployment was less than 5 percent. Unemployment stemmed from personal reasons (marriage, maternity, family commitments). Married, widowed, or divorced dental hygienists expressed greater satisfaction with most aspects of dental hygiene practice than single dental hygienists (Sodano and Seto Job 346). Dental hygienists with a female role orientation (affectionate, cheerful, gentle) were found to be more

satisfied than those with a masculine orientation (aggressive, ambitious, assertive) (346).

Weinstein's (22) study examined the intrinsic versus extrinsic reward motivation of dental hygienists. Higher levels of job satisfaction were found in dental hygienists who were motivated by the intrinsic rewards of private practice (relieving pain, serving others, contributing to health) than by dental hygienists with extrinsic rewards (job security, prestige, good income, etc). Data was gathered through a questionnaire which was completed by 69 out of the 120 dental hygienists attending an ADHA meeting in New York City (NYC). The sample study consisted of faculty members of two dental hygiene schools in NYC and dental hygienists attending an alumni meeting. Of the 69 respondents, 38 held associate degrees, 23 held baccalaureate degrees and 8 held master's degrees. Weinstein (22) found greater job satisfaction among older, associate degree respondents.

Farrugia (300) investigated the relationship between the scope of dental hygiene functions and career and job satisfaction. Of the two samples studied, one group consisted of senior dental hygiene students (N=62) and the other (N=76) of dental hygiene alumni from the University of Michigan. The instrument consisted of a questionnaire measuring, 1) scope of dental hygiene functions expected by students and experienced graduates and 2) career satisfaction as expressed by both groups (300). Farrugia found students expected a broader

scope of functions than what alumni actually experience. Also, students responded to greater career satisfaction than alumni. Job dissatisfaction among alumni was related to lack of work variety and inability to use learned skills and knowledge with current employment. Farrugia (300) concluded that chances for career satisfaction are minimal for dental hygienists who are interested in administering a variety of services. Students with high role expectations therefore will be disappointed with service restrictions set in private practice.

Dental hygienists are formally educated to perform a variety of services which state regulations prohibit (Darby and Schwartz 271; Rose-Sutton 166). The lack of variety and responsibility imposed by dental and state practice acts on dental hygiene practice was the major source of dissatisfaction studied and cited by several researchers (Adelson, et al 25; Deckard, et al 307; Farrugia 300; Heine, et al 22; Heine-Drazin, et al 117; Hunter and Rossman 559; Lawson, et al 74; McAdams 563). Research found overeducated and underutilized dental hygiene clinicians were the most dissatisfied with their chosen career (25; 300; 74; 563).

Research regarding career satisfaction examined the aspects of variety of work, working conditions and interpersonal relationships. The reasons for dissatisfaction found in these studies cited by practitioners were infrequent promotions, the lack of recognition, and the lack of oppor-

tunities for advancement (Heine-Drazin, et al 117; Hunter and Rossman 559; Lawson and Martinoff 74; Heine, et al 22; Sodano and Seto 346; McAdams 563). Practitioners expressed dissatisfaction with clinical employment as it provides minimal to no performance appraisal or concrete rewards for clinical merit (Adelson 25; Deckard 307; Farrugia 300; 117; 559; 74; 22; 346; 563). Overall satisfaction was found with work environment and conditions such as working hours, well-equipped facilities, and interrelationships with coworkers, dentists and patients (117; 559; 22; 300; Pitchford 559).

Keevil (11) conducted a five-year follow-up investigation from a 1974 study which examined dental hygienists' attitudes regarding their profession. Of the 1,255 questionnaires sent to dental hygiene alumni who graduated between 1940 and 1978 from the University of Michigan, 764 responded (60.9 percent response rate). The results of the survey revealed the majority of dental hygiene alumni who expressed that they would recommend dental hygiene as a desirable career dropped from 88.3 percent in 1974 to 79.6 percent in 1979. Reasons most frequently cited for not recommending dental hygiene were 1) career limited in growth and development, 2) dental hygiene not intellectually stimulating, and 3) too many dental hygienists in the market. According to the literature, dental hygienists who are most satisfied with their profession occupy a female-orientation, are motivated by intrinsic rewards, content with limited clinical responsibilities, and hold an

associate degree. Therefore, this is the profile of the practitioner who is most likely to promote the profession of dental hygiene.

Professional Affiliation

The degree of career satisfaction also may reflect professional affiliation demonstrated by members of an organization. Perceived benefits of membership is the primary reason one joins his/her professional organization (Blau 86; Olsen 234). Benefits are either tangible or intangible. Intangible benefits include lobbying and standard setting which are also enjoyed by nonmembers (Lyons 5). The tangible benefits of professional membership are support and commitment towards the advancement of a profession (Lamb-Meckanick and Block 399). Other benefits include insurance benefits, credit card privileges, travel privileges, etc.

Dental hygiene's professional association is the American Dental Hygienists' Association (ADHA), established on September 12, 1923, in Cleveland, Ohio (Motley 134). With membership strength, the ADHA can be an influential force in determining the future of the profession. The association functions as an instrument for members to provide quality care to the public (178). ADHA's mission statement is, "to improve the public's total health by increasing the awareness of and access to quality oral health care" (ADHA Difference 4). The Association's goals are as follows:

- to increase the quality of care provided by the dental hygienist,
- to increase the number of people who utilize the services of a dental hygienist,
- to reduce obstacles to the public's access to alternate practice settings,
- to increase the membership of the American Dental Hygienists' Association to represent the majority of licensed dental hygienists, and
- to improve the quality of worklife for dental hygienists (4).

During the 1960s, the association's activities focused on dental hygiene education (Motley 166). Policy statements on dental hygiene education and practice were developed. The standards and objectives of the certificate/associate degree, baccalaureate and graduate programs were redefined. Today, ADHA provides a number of scholarships for candidates pursuing careers in dental hygiene (167).

As the number of dental hygienists increased during the 1970s, ADHA's activities increased (168). It was during this period where many states witnessed the expansion of dental hygiene services. Dental hygienists gained legislative power via dental hygienists serving as members on state dental boards with partial or full voting power (167).

Approximately one-third (23,400) of dental hygienists in the United States currently are association members, while two-thirds (47,625) are nonmembers (Kvix ADHA 274). A 1982 survey conducted for ADHA, by University of Illinois' Survey Research Laboratory, reported on the attitudes, preferences

and perceptions of dental hygienists (ADHA Who Are We 14). The study investigated 1,503 dental hygienists, of which 897 were members and 606 were nonmembers. As a result of this study, a profile of the typical dental hygienist was extracted. The dental hygienist of the early 1980s was characterized as approximately 29 years old holding an associate degree, licensed within the past 10 years, employed in private practice, married and sharing a joint income (14). Working in a community rather than metropolitan area, the typical dental hygienist worked between 30-40 hours a week, was paid on a daily basis and earned roughly \$15,000 a year (14). From this study, ADHA was able to determine whether there were any major differences between members and nonmembers. No significant differences appeared between the two groups except that more association members hold a baccalaureate degree and tend to be involved in community services than nonmembers (14). Nonmembers appeared to be in practice slightly longer than members. The most interesting point found in this study was from a membership recruitment and retention standpoint. "Over three-fourths of the nonmembers participating in the survey had been members of ADHA at one time" (14). The reasons cited for not being a member were that membership dues were too high (69.9 percent), membership benefits did not meet needs (29.2 percent), unfamiliarity with the benefits offered (12.2 percent), left the profession (9.8 percent) and too busy (9.1 percent) (14). The primary reasons cited for membership were

concerns for representation in professional interests (67.1 percent), ADHA continuing education programs (14.2 percent), insurance programs (13.2 percent) and employment services (1.9 percent) (14).

The 1984 ADHA demographic survey update found very little change in the demographic and employment characteristics of dental hygienists (ADHA Update 121). Results found the profile of an ADHA member to be young, married, holding an associate degree, practicing less than 6 years, employed more than 30 hours a week and licenced in at least one state (121).

From a 1985 survey, which examined the attitudes held by Virginia dental hygienists towards current dental hygiene issues, a profile citing the differences between association members from nonmembers was compiled (Begun and Swisher 508). The study compared the attitudes, demographic and professional activity characteristics of association members and nonmembers. Names and addresses of 1456 licensed Virginia dental hygienists were obtained from the State Board of Dentistry, and 22.5 percent of this total were identified as members of the Virginia Dental Hygienists' Association (VDHA) (508). From this total of 1456, researchers systematically selected every fourth VDHA member (n=145) and nonmember (n=294). An 82 percent response rate was obtained. From the total 439 dental hygienists surveyed, 137 responses were VDHA members and 224 were nonmembers (508). The study found the majority of Virginia dental hygienists were employed in private practice,

working on the average of 30 hours per week, and earning an average income of \$15,700 a year. There were only a few mentionable differences found between members and nonmembers. "Members were found to average a salary of \$17,000 a year, are generally older (36 years vs. 32 years), more experienced (10 years vs. 8 years) and more likely to hold a baccalaureate degree (46 percent vs. 38 percent)" (508).

Supply and Demand of Dental Hygienists

As the number of clinical opportunities continue to increase for dental hygienists, there is concern for the declining number of dental hygiene program entrants and graduates and this effect on the dental marketplace (Settimi 28; Solomon and Gray 537). Between the years 1960 and 1980, dental hygiene witnessed an increase in its entry level graduates from 1,000 to 5,184 (Table 1). Since 1980, dental hygiene graduates have decreased significantly to 3,880, a decrease of 25.2 percent (537). From 1988 to 1990 there has been an approximate 1.9 percent growth in graduates.

In 1986 dentists reported a lack of available dental hygienists during the 1986 American Dental Association (ADA)

Table 1

DENTAL HYGIENE ENROLLMENTS AND GRADUATES FROM 1960-1990

YEAR	ENROLLMENTS		GRADUATES
	FIRST YEAR	TOTAL	
1960	NA	2,497	1,000
1961	NA	2,751	1,023
1962	NA	3,005	1,219
1963	NA	3,278	1,257
1964	NA	3,502	1,429
1965	NA	3,863	1,492
1966	NA	4,041	1,650
1967	NA	4,309	1,739
1968	NA	5,187	1,834
1969	NA	5,931	2,231
1970	3,265	6,854	2,465
1971	4,549	7,584	2,950
1972	4,012	8,314	2,814
1973	3,475	9,044	2,678
1974	3,953	9,774	4,310
1975	4,347	10,084	4,568
1976	5,598	10,654	4,616
1977	5,592	10,815	4,874
1978	5,706	11,055	5,026
1979	5,667	10,932	5,149
1980	5,619	10,867	5,184
1981	5,452	10,497	5,088
1982	5,208	10,051	4,818
1983	5,117	9,649	4,652
1984	4,966	9,180	4,362
1985	4,866	8,923	4,024
1986	4,886	8,936	4,037
1987	4,893	8,936	3,880
1988	4,883	8,820	3,892
1989	5,250	9,309	3,904
1990	5,419	9,824	3,953

Sources: Solomon, E. and Gray (1960-1987); American Dental Association, Annual Report on Allied Dental Education (1988-1990).

meeting (Joint Report CDP 117-29). The recent increased demand for dental hygienists has generated rumors of a dental hygiene manpower shortage. However, there is no documentation in the literature to support this claim.

According to a 1989 report, published by the Institute of Medicine (13), market imbalances can falsely represent shortages.

It is the nature of the market to adjust eventually to change. Projected imbalances in supply and demand do not mean that shortage or surplus will occur. Rather, they signal that employers and potential employees must and probably will, make adjustments. Only rarely do markets not accommodate changes in supply and demand. But there are inherent time lags and inefficiencies in the process that can be lessened by public and private interventions (5).

The American Dental Hygienists' Association (ADHA), established the Special Committee to Study Manpower Issues to investigate the claims of a dental hygienist shortage (ADHA: Manpower Report 1-12). The results signaled evidence of a "false" dental hygiene manpower shortage. The results of the study were based on calculating the total number of licensed/employed dental hygienists and total number of licensed/unemployed dental hygienists. The data of licensed and employed dental hygienists were collected by contacting state regulatory agencies. ADHA contracted a study to calculate the number of licensed and unemployed dental hygienists and to determine the reasons for unemployment (ADHA Re-entry 10).

According to the ADHA Manpower study, roughly 98,000 dental hygienists are licensed in the United States (ADHA Manpower 4). From this total, approximately 71,540 dental hygienists were cited as licensed and employed. Therefore, an estimated 26,460 were left as licensed and unemployed. In 1986, the Bureau of Statistics found 87,000 vacant dental hygiene positions (US Dept of Labor 1986).

A comparison of figures cited by the ADHA study with those by the Bureau of Statistics reveal an estimated 15,460 dental hygiene vacancies. Although this appears to indicate a shortage, ADHA defines this as a "false" shortage because the study also found that 65 percent of the licensed and unemployed dental hygienists would consider returning to clinical employment if working conditions were improved (Manpower 24).

In 1990, a comprehensive dental hygiene manpower study in Virginia was conducted (Nielsen 5). One aspect of this research was to determine the existing dental hygiene manpower distribution. Results found no overall dental hygiene manpower shortage in Virginia (48). However, Virginia appears to be experiencing a maldistribution of dental hygienists. To improve this situation, Nielsen recommends employment of marketing strategies to attract dental hygienists to these deficient areas (48).

In 1989, the ADHA conducted a study to investigate reasons dental hygienists leave their profession and what

factors would encourage them to re-enter clinical practice (ADHA Re-entry 10). Results of the study found inadequate salaries and benefits, family responsibilities, boredom and fear of infectious diseases to be the major reasons for leaving the profession (10).

The most influential factor which has impeded licensed and inactive dental hygienists from returning to clinical practice is compensation. For example, dental hygienists did not witness true growth in real wages from 1978 to 1986. Between 1978 and 1982 real wages were adjusted for inflation. During 1982 and 1985 dental hygienists experienced actual wage increases, although, not as quickly as witnessed by dentists (ADHA Manpower 4; U.S Dept. of Labor 1984, 1986, 1988).

Principles of economics explain that an increase in real income will consequently result in an increased supply of manpower (Eggert 12). Once increases in dental hygiene real wages are executed, the supply of dental hygienists will increase (ADHA Manpower 4). Therefore, compensation must be increased to respond to the increased demand for and utilization of dental hygienists (4).

Within the last 30 years dollars per capita spent on dental and dental hygiene care have increased. The increase of employer-sponsored dental insurance, rise in real incomes, and growing public awareness of the importance of oral health has facilitated this increase (Jean 18; Vermette and Doherty 480). Dental hygiene wages should reflect the increases

witnessed in dentistry. As the most influential factor, inadequate compensation packages were the driving force compelling dental hygienists to depart from private practice. Competitive compensation packages would attract dental hygienists and potential dental hygiene candidates into the workforce.

Summary

The profession of dental hygiene has evolved through three of the four stages of the evolutionary cycle. In its maturity stage, society is experiencing an increase in market demand for dental hygienists. However, dental hygiene program enrollments indicate a steady decline in qualified applicants.

Limited image-related studies found in the literature suggest that the ambiguous image of dental hygiene has impeded its growth and recognition. An unclear image is unrecognizable to prospective recruits. Dental hygienists have the ability to define clearly the nature, scope, and significance of their profession. By believing and communicating that they are a vital and an identifiable asset in the health care system, dental hygiene practitioners can promote the dental hygiene profession to applicants, dentists and consumers. With the use of marketing principles, dental hygienists can attain the societal recognition they desire.

The literature maintains that dental hygienists are generally satisfied with their chosen careers. However,

research examining dental hygiene attrition found that inadequate salaries, benefits, and undesirable work conditions force dental hygienists to depart from clinical practice. Employers (dentists) that use internal marketing strategies can better meet the needs and wants of their employees (dental hygienists).

The literature suggests the low ADHA membership rate is not a contributing factor influencing career satisfaction. ADHA provides dental hygienists an array of personal and professional benefits; however, dental hygienists perceive the costs of these benefits as high. Perhaps the perceived high membership fees exceed the altruistic benefits of membership. With the ambiguous dental hygiene image, alleged career satisfaction, low level of professional affiliation as defined by membership in ADHA and the fluctuating market need for dental hygienists, one must question whether dental hygienists are promoting careers in dental hygiene.

CHAPTER 3

Methods and Materials

A descriptive survey was conducted to establish whether dental hygienists were promoting their profession as a desirable career, and to determine whether the influential factors of the perceived image of dental hygiene, the degree of career and job satisfaction, the market need for dental hygienists, and professional affiliation contributed to this decision. The self-designed attitudinal questionnaire, entitled Dental Hygienists' Participation in Career Recruitment, was used to gather this information.

Sample Description

The sample population of 600 was selected from the 1,764 registered dental hygienists who resided in the Commonwealth of Virginia. The sample size was chosen on the basis of a study conducted by Hovland (Hovland et al 270). Hovland (270) found that with a low nonresponse rate, the possibility of nonresponse bias is minimal within a homogenous population. As the population selected for this study was dental hygienists, a homogenous population, sample size was not a critical factor effecting the survey results.

Using the list of registered dental hygienists obtained from the Virginia State Board of Dentistry (June 1990), every

third subject was chosen systematically for this sample population.

Methodology

Data were collected using the survey "Dental Hygiene Practitioners' Participation In Career Recruitment". By using a questionnaire, considerable data was gathered quickly and tabulated easily.

To enhance consumer responses, the questionnaire was designed to be completed by the respondent within approximately 15 minutes. The questionnaire were mailed on September 14, 1990. An enclosed cover letter explained the purpose and importance of the study and stated the deadline for answering the survey; a self-addressed, stamped envelope accompanied the questionnaire. A period of two weeks was allowed for respondents to return the questionnaire. Non-respondents were identified by pre-coding the questionnaires. After two weeks, a second mailing was sent to non-respondents. The same questionnaire with another cover letter, reiterating the importance of completing the questionnaire, was sent along with a self-addressed, stamped envelope.

Protection of Human Subjects

In accordance with the Old Dominion University Committee on the Protection of Human Subjects, the procedures listed below were followed:

Subject Population: Subjects were selected from the list of registered dental hygienists residing in the Commonwealth of Virginia.

Consent Procedure: By completing and returning the questionnaire, the respondents automatically gave informed voluntary consent to participate.

Protection of Subjects' Rights: Within the cover letter, subjects were ensured of anonymity and confidentiality. Self-addressed envelopes were pre-coded to identify subjects who did not return the questionnaire. A follow-up letter and another copy of the questionnaire were sent to non-respondents. Subjects were informed that results would be reported in aggregate form only and would be available upon request.

Potential Risks: The descriptive nature of the study posed no risk to the participants involved. All responses remained confidential and data reported in group form.

Potential Benefits: Data collected from this survey provided information on influencing factors which affect dental hygienists' attitudes towards promoting their profession. The information may be beneficial in assessing strategies for recruiting and promoting the dental hygiene profession.

Risk/Benefit Ratio: Since no risks exist, the results can only be beneficial.

Instrumentation

The two part Dental Hygienists' Participation in Career Recruitment questionnaire employed 48 items. Part 1 contained 35 attitudinal statements measured on a Likert-type semantic differential scale. Part 2 contained 13 demographic items. The possible responses on the Likert-type scale were strongly agree, agree, undecided, disagree, or strongly disagree. The attitudinal statements were designed to examine the influential factors that contributed to the dental hygienist's promotional attitude and behavior. The influential factors included: the perceived image of dental hygiene, degree of career and job satisfaction, market supply/demand for dental hygienists, the influence of professional affiliation, and the promotional and behavioral responsibilities demonstrated by the dental hygienist. Questionnaire statements 2, 3, 4, 5, 9, 16, 28, and 29 related to the perceived image of dental hygiene. Questionnaire statements 1, 6, 12, 13, 17, and 27 corresponded to the degree of career and job satisfaction. Questionnaire statements 8, 24, 26, 31, 33, and 34 related to the market demand for dental hygienists. Questionnaire statements 7, 20, 22, 23, 30 and 32 corresponded to the influence of professional affiliation. Questionnaire statements 10, 11, 14, 15, 18, 19, 21, 25 and 35 corresponded to the promotional attitudes and behaviors.

The demographic items included age, year graduated from dental hygiene school, highest degree earned, years of prac-

tice, current employment status and setting, reasons for current unemployment, number of employed hours per week and yearly salary. Demographics also included ADHA membership status and reasons for membership or nonmembership.

The survey was reviewed by four faculty members of Old Dominion University. To increase the reliability and validity of the questionnaire, a pilot study was conducted. A random sample of 10 registered Virginia dental hygienists participated in the pilot study. The names were selected from Virginia Board of Dentistry's list (June 1990) of registered dental hygienists. Outcome of the pilot study were used to clarify attitudinal statements found in questionnaire.

Statistical Treatment

The data collected were discrete, nominal, and reported in summary form. Data were analyzed and tabulated using the Statistical Analysis System (SAS) for computer analysis. Results of the data collected were organized by frequency distributions, cross tabulations and analyzed by utilizing chi-square tests of independence at the 0.05 level of confidence. Chi-square was used to determine significant correlations between attitudinal statements and promotional statements. Chi-square was also used to determine significant correlations between demographic items and attitudinal statements.

CHAPTER 4

Results and Discussion

Six hundred registered dental hygienists in the Commonwealth of Virginia were sent the Dental Hygienists' Participation in Career Recruitment questionnaire. From the first mailing, 293 questionnaires were returned. An additional 100 responses were received from the second mailing, resulting in a total response rate of 65.5 percent. Twenty-six questionnaires were returned incomplete and were not included in the data analysis. The results and discussion are based on the 367 (61.5 percent) responses. The reported percentages are adjusted frequencies which excluded incomplete data and inapplicable responses. The sum of percentages reported may not equal 100 percent due to rounding or to SAS management of incomplete responses.

The data collected were entered into the computer for analysis using SAS. Part 1 of the questionnaire consisted of 35 attitudinal statements answered on a Likert-type scale of strongly agree, agree, undecided, disagree and strongly disagree. Strongly agree and agree were grouped for statistical analysis as were strongly disagree and disagree; therefore, responses were agree, undecided and disagree. Data from each statement were analyzed using percentages, frequency distributions, and chi-square test of independence at the 0.05

confidence level. Results for each statement in Part 1 of the questionnaire are located in Appendix E.

The reported results were based on statistical significance found between statements related to the influential factors and the promotional statements. These factors were as follows: the perceived image of dental hygiene, the degree of career and job satisfaction, the market supply/demand for dental hygienists, and the influence of professional affiliation and the promotional and behavioral responsibilities demonstrated by the dental hygienist. The promotional statements included questions numbered 11, 14, 15, 18, 19, 25, and 35 (See Table 2).

Part 2 of the questionnaire contained demographic items, e.g., age, year graduated from dental hygiene school, educational degree earned, years of dental hygiene practice, current employment status, reasons for unemployment, employment setting, hours employed, salary, current employment satisfaction, ADHA membership status and reasons for membership status. Chi-square tests of independence were used to determine significant correlations between demographic items and attitudinal statements.

Results

Sample

The following is a profile of the demographic characteristics found in this sample population. Table 3 displays all percentages of the demographic information. The majority

Table 2

PROMOTIONAL STATEMENTS

11. I tell prospective candidates that dental hygiene is a desirable career.
14. I tell my patients that I am proud to be a dental hygienist.
15. I take the responsibility to encourage interested candidates to pursue a career in dental hygiene.
18. When asked, I discourage potential candidates from a career in dental hygiene.
19. It is ADHA's responsibility to promote a career in dental hygiene.
21. Educators are in the best position to promote careers in dental hygiene.
25. Encouraging others to enter dental hygiene programs will only decrease salaries and chances for securing "better jobs".
35. I believe that dental hygiene will continue to exist as a distinct profession in the year 2000.

Table 3

DEMOGRAPHIC CHARACTERISTICS OF SAMPLE

<u>CHARACTERISTIC</u>	<u>N</u>	<u>%</u>	<u>CHARACTERISTICS</u>	<u>N</u>	<u>%</u>
AGE			REASNS FR UNEMPLOY		
20-25	27	6.8	FAMILY RESPNS	28	7.6
26-30	81	22.1	PREFER NONHYG JOB	6	1.6
31-35	102	27.9	NO HYG JOB AVAIL	1	0.3
36-40	73	19.9	RETURN TO SCHOOL	1	0.3
41-45	49	13.4	OTHER	6	1.6
46-50	22	6.0	WORKING AS DH	323	88.0
51-60	11	3.0	TOTAL	367	100.0
61-65	3	0.8			
TOTAL	367	100.0			
GRADUATE			EMPLOYMNT SETTING		
BEFORE 1965	32	7.7	CLINICAL PRACT	307	95.0
1966-1970	31	8.2	EDUCATION	6	1.9
1971-1975	64	17.3	PUBLIC HEALTH	2	0.6
1976-1980	76	20.9	INDUSTRY	1	0.3
1981-1985	110	30.2	OTHER	7	2.2
1986-1990	57	15.7	NO RESPONSE	44	
TOTAL	367	100.0	TOTAL	367	100.0
DEGREE			HOURS		
ASSOCIATE/CERTIF	191	52.0	LESS THAN 20	55	17.2
BACHELOR	156	42.5	20-30	85	26.6
MASTER	19	5.2	31-40	161	50.5
DOCTORATE	1	0.3	MORE THAN 40	18	5.6
TOTAL	367	100.0	NO RESPONSE	48	
			TOTAL	367	100.0
YEARS PRAC			SALARY		
5-LESS	84	22.5	LESS THAN \$14,000	40	12.6
6-10	117	32.1	\$15,000-\$19,999	38	12.0
11-15	76	20.8	\$20,000-\$24,999	48	15.1
16-20	61	16.7	\$25,000-\$29,999	75	23.1
21-MORE	29	7.9	\$30,000-\$34,999	50	15.1
TOTAL	367	100.0	\$35,000-\$39,999	35	11.0
			\$40,000-\$44,999	16	5.0
EMPLOYED			\$45,000-\$49,999	8	2.5
YES	322	87.7	MORE THAN \$50,000	7	2.2
NO	45	12.3	NO RESPONSE	50	
TOTAL	367	100.0	TOTAL	367	100.0
CURRENT EMPLOYMENT			MEMBER OF ADHA		
SATISFIED	262	84.5	YES	141	38.1
DISSATISFIED	48	15.5	NO	226	61.9
NO RESPONSE	57		TOTAL	367	100.0
TOTAL	367	100.0			

Table 3
(continued)

REASONS FOR ADHA NONMEMBERSHIP	CUMULATIVE FREQUENCY
MEMBERSHIP DUES TOO HIGH	168
MEMBERSHIP BENEFITS DO NOT MEET PRESENT NEEDS	101
TOO BUSY	100
UNFAMILIAR WITH MEMBERSHIP OFFERINGS	68
NOT INTERESTED	61
LEFT PROFESSION	26
REASONS FOR ADHA MEMBERSHIP	
SUPPORT MY PROFESSION	131
TAKE ADVANTAGE OF CONTINUING ED	82
PARTICIPATE IN LEGISLATIVE ISSUES	78
RECEIVE THE JOURNAL	65
INSURANCE BENEFITS	24

of respondents, 27.9 percent (n=102), were between the ages of 31-35. Over 30 percent (n=110) graduated from dental hygiene programs between 1981-1985. Fifty-two percent of respondents (n=191) held an associate degree or certificate, while 42.5 percent (n=156) held a baccalaureate degree. Eighty-eight percent (n=322) of the sample were employed, and 95 percent (n=307) of those employed worked in clinical practice. Thirty-two percent of the respondents (n=117) had been in clinical practice between 6-10 years. The majority (7.6 percent) of the unemployed respondents were not working due to "family responsibilities". Respondents (3.2 percent) who completely left dental hygiene cited "boredom", "lack of recognition", "desire to grow", "desire to be self-employed", and "dissatisfied with salary and benefits", as "other reasons" for nonemployment in dental hygiene. Approximately, 50 percent (n=161) of the sample population worked between 31-40 hours a week, and 23 percent (n=75) earned a yearly salary between 25,000-29,000. More than 84 percent (n=262) of the respondents expressed satisfaction with their current employment setting. The majority of the sample population, 61.9 percent (n=226) were not members of ADHA. The three primary reasons for nonmembership in rank order were 1) membership dues too high, 2) benefits do not meet present needs, and 3) too busy. Of the 38.1 percent (n=141) who were members of ADHA, the three primary reasons for membership in rank order were 1) support the profession, 2) take advantage of continu-

ing education courses, and 3) participate in legislative issues. The results found for each of the research questions follows.

Research Question 1 Does the image of the profession of dental hygiene influence dental hygienists' promotion efforts?

Statements 2, 3, 4, 5, 9, and 16 addressed research question 1. Table 4 displays statistical correlations between demographic items and image-related statements. Statistical correlations between image and promotional statements are found in Table 5.

Statement 2: "My patients regard me as a professional rather than an auxiliary member of the dental team." Responses found 69.9 percent (n=253) of the sample population agreed, while 17.1 percent (n=62) were undecided and 13.0 percent (n=47) disagreed (Appendix E). As the majority of responses were in agreement with this statement, no demographic profile was obtained. A significance was found between statement 2 and current job satisfaction (Table 4). Significant correlations were found between statement 2 and the following promotional statements: 11 (I tell prospective candidates that dental hygiene is a desirable career), 14 (I tell my patients that I am proud to be a dental hygienist), 15 (I take the responsibility to encourage interested candidates to pursue careers in dental hygiene), and 18 (When asked, I

Table 4

**CORRELATIONS BETWEEN THE IMAGE OF DENTAL HYGIENE STATEMENTS
AND DEMOGRAPHIC ITEMS**

IMAGE STATEMENTS

DEMOGRAPHIC ITEMS

	AGE	DEGREE	YEAR GRAD.	YEARS PRACT.	HOURS WORKED	SALARY	CURRENT SATISF.	ADHA STATUS
2. My patients regard me as a professional rather than auxiliary member of dental team.	NS	NS	NS	NS	NS	NS	0.000	NS
3. A majority of people believe that dental hygienists earn high salaries.	NS	NS	NS	NS	NS	NS	NS	NS
4. There is status and prestige associated with being a dental hygienist.	NS	0.008	NS	NS	NS	NS	0.000	NS
5. The practice of dental hygiene is considered secondary to dentistry.	NS	NS	NS	NS	NS	NS	NS	NS
9. The majority of my patients perceive my role as a dental hygienist to be that of a "toothcleaner".	NS	NS	0.036	0.009	NS	NS	NS	0.043
16. Dental hygiene is more than a job; it is my career.	NS	0.036	NS	NS	NS	NS	0.000	NS

NS= NO SIGNIFICANCE

 $P \leq 0.05$

discourage potential candidates from a career in dental hygiene) (Table 5).

Statement 3: "A majority of people believe that dental hygienists earn high salaries." Fifty-five percent (n=203) of the respondents agreed, while 22.6 percent (n=82) were undecided and 21.5 percent (n=78) disagreed (Appendix E). No profile was extracted from this statement. No significant correlations were found between statement 3 and demographic items (Table 4). No correlations were found between statement 3 and promotional statements (Table 5).

Statement 4: "There is status and prestige associated with being a dental hygienist." Fifty-four percent (n=200) of the respondents agreed, while 21.5 percent (n=79) were undecided and 24.0 percent (n=88) disagreed (Appendix E). No demographic profile was derived from this statement. Statistical correlations were found between statement 4 and demographic items, educational degree and current job satisfaction (Table 4). Significant correlations were found between statement 4 and promotional statements 11 (I tell prospective candidates that dental hygiene is a desirable career), 14 (I tell my patients that I am proud to be a dental hygienist), 15 (I take the responsibility to encourage interested candidates to pursue a career in dental hygiene), 18 (When asked, I discourage potential candidates from a career in dental hygiene), and 35 (I believe that dental hygiene will continue to exist as a distinct profession in the year 2000)

Table 5

**CORRELATIONS BETWEEN THE IMAGE OF DENTAL HYGIENE
AND PROMOTIONAL STATEMENTS**

**IMAGE
STATEMENTS**

PROMOTIONAL STATEMENTS

	11. I tell prospective candidates dental hygiene is a desirable career.	14. I tell my patients that I am proud to be a dental hygienist.	15. I take the responsibility to encourage interested candidates to pursue a career in dental hygiene.	18. When asked, I discourage candidates from a career in dental hygiene.
2. My patients regard me a professional rather than auxiliary member of dental team.	0.000	0.000	0.000	0.030
3. A majority of people believe dental hygienists earn high salaries.	NS	NS	NS	NS
4. There is status and prestige associated with being a dental hygienist	0.000	0.000	0.000	0.000
5. Dental hygiene is considered secondary to dentistry.	NS	NS	NS	NS
9. The majority of my patients perceive my role to be that of a "toothcleaner".	NS	NS	NS	NS
16. Dental hygiene is more than a job; it is my career.	0.000	0.000	0.000	0.000

NS = NO SIGNIFICANCE

$P \leq 0.05$

Table 5 (continued)

**CORRELATIONS BETWEEN THE IMAGE OF DENTAL HYGIENE
AND PROMOTIONAL STATEMENTS**

IMAGE STATEMENTS

PROMOTIONAL STATEMENTS

	19. It is ADHA'S responsibility to promote a career in dental hygiene.	21. Dental hygiene educators are in the best position to promote careers in dental hygiene.	25. Encouraging other to enter dental hygiene programs will only decrease salaries and chances for securing "better jobs".	35. I believe that dental hygiene will continue to exist as a distinct profession in the year 2000.
2. My patients regard me a professional rather than auxiliary member of dental team.	NS	NS	NS	NS
3. A majority of people believe that dental hygienists earn high salaries.	NS	NS	NS	NS
4. There is status and prestige associated with being a dental hygienist.	NS	NS	NS	0.006
5. The practice of dental hygiene is considered secondary to dentistry.	NS	NS	NS	NS
9. The majority of my patients perceive my role as a dental hygienist as a "toothcleaner".	NS	NS	NS	NS
16. Dental hygiene is more than a job; it is my career.	NS	NS	NS	0.004

NS= NO SIGNIFICANCE

 $P \leq 0.05$

(Table 5).

Statement 5: "The practice of dental hygiene is considered secondary to dentistry." Results found 61.2 percent (n=259) of the respondents agreed, while 9.6 percent (n=35) were undecided and 19.2 percent (n=70) disagreed (Appendix E). No demographic profile was obtained from this statement. No significance was found between statement 5 and demographic items (Table 4) or between statement 5 and the promotional statements (Table 5).

Statement 9: "The majority of my patients perceive my role as a dental hygienist to be that of a "tooth cleaner"." Sixty percent (n=218) of the respondents agreed, while 8.8 percent (n=32) were undecided, and 31.3 percent (n=114) disagreed (Appendix E). No specific profile was found with this statement. Correlations were found between statement 9 and demographic items year graduated, years practiced and ADHA membership status (Table 4). No significant correlations were found between statement 9 and the promotional statements (Table 5).

Statement 16: "Dental hygiene is more than a job; it is my career." Seventy-five percent (n=276) of the respondents agreed, while 9.9 percent (n=36) were undecided and 14.3 percent (n=52) disagreed (Appendix E). As the majority of the respondents were in agreement with this statement, no demographic profile was extracted. Results showed correlations between statement 16 and demographic items educational

degree, and current employment satisfaction (Table 4). Significant correlations were found between statement 16 and the following promotional statements: 11 (I tell prospective candidates that dental hygiene is a desirable career), 14 (I tell my patients I am proud to be dental hygienist), 15 (I take the responsibility to encourage interested candidates to pursue a career in dental hygiene), 18 (When asked, I discourage potential candidates from a career in dental hygiene) and 35 (I believe dental hygiene will continue to exist as a distinct profession in the year 2000) (Table 5).

Statements 28, "My patients trust me", and 29, "I remain current on health related issues and technology" related to the image of dental hygiene. Results showed 97.8 percent (n=356) of the respondents were agreement with statement 28, while 1.4 percent (n=5) were undecided and 0.8 percent (n=3) disagreed. Responses to statement 29 found 92.3 percent of the respondents (n=337) agreed, while 4.9 percent (n=18) were undecided and 2.7 percent (n=10) disagreed (Appendix 12).

These results suggest respondents may have been influenced by the Hawthorne effect. The researcher has omitted discussion on these statements as the results were found to be biased. Should this questionnaire be used again for future studies, the researcher suggests eliminating these statements from the survey.

Research Question 2 Does career satisfaction or dissatisfaction influence practitioners' attitudes towards promoting their profession?

Statements 1, 6, 12, 13, 17, 27, examined research question 2. Table 6 shows statistical correlations between career and job satisfaction statements and demographic items. Significant correlations between career satisfaction and the promotional statements are presented in Table 7.

Statement 1: "I am satisfied with my career choice in dental hygiene." Eighty-two percent (n=301) of the respondents agreed, while 7.9 percent (n=29) were undecided and 10.1 percent (n=37) disagreed (Appendix E). As the majority of the respondents agreed with this statement, no specific profile was extracted. No correlations were found between statement 1 and demographic items (Table 6). Significant correlations were found between statement 1 and promotional statements 11 (I tell prospective candidates that dental hygiene is a desirable career), 14 (I tell my patients I am proud to be a dental hygienist), 15 (I take the responsibility to encourage interested candidates to pursue a career in dental hygiene), 18 (When asked, I discourage potential candidates from a career in dental hygiene) and 35 (I believe that dental hygiene will continue to exist as a distinct profession in the year 2000) (Table 7).

Statement 6: "I am dissatisfied with my career choice in dental hygiene." Approximately 13 percent (n=47) of the

Table 6

**CORRELATIONS BETWEEN CAREER AND JOB SATISFACTION STATEMENTS
AND DEMOGRAPHIC ITEMS**

SATISFACTION STATEMENTS

DEMOGRAPHIC ITEMS

	AGE	DEGREE	YEAR GRAD.	YEARS PRACT.	HOURS WORKED	SALARY	CURRENT SATISF.	ADHA STATUS
1. I am satisfied with my career choice in dental hygiene.	NS	NS	NS	NS	NS	NS	NS	NS
6. I am dissatisfied with my career choice in dental hygiene.	NS	NS	NS	NS	NS	NS	NS	NS
12. I am satisfied with the variety of services I provide to my patients.	NS	NS	NS	NS	0.033	NS	0.033	NS
13. I find clinical practice discouraging because of the lack of opportunities for advancement.	NS	0.038	0.010	0.049	NS	NS	0.000	NS
17. I am satisfied with my earning potential as a clinical dental hygienist.	0.019	0.055	NS	0.030	NS	NS	0.002	NS
27. I am satisfied with the benefits I receive in my current practice.	NS	NS	NS	NS	NS	NS	NS	NS

NS= NO SIGNIFICANCE

 $P \leq 0.05$

Table 7

**CORRELATIONS BETWEEN CAREER AND JOB SATISFACTION
AND PROMOTIONAL STATEMENTS**

**SATISFACTION
STATEMENTS**

PROMOTIONAL STATEMENTS

	11. I tell prospective candidates that dental hygiene is a desirable career.	14. I tell my patients that I am proud to be a dental hygienist.	15. I take the responsibility to encourage interested candidates to pursue a career in dental hygiene.	18. When asked, I discourage potential candidates from a career in dental hygiene
1. I am satisfied with my career choice in dental hygiene.	0.000	0.000	0.000	0.000
6. I am dissatisfied with my career choice in dental hygiene.	0.000	0.000	0.000	0.000
12. I am satisfied with the variety of service I provide my patients.	0.000	0.000	0.000	0.000
13. I find clinical practice discouraging because of the lack of opportunities for advancement.	0.000	0.000	0.000	0.000
17. I am satisfied with my earning potential as a dental hygienist.	0.000	0.001	0.000	0.000
27. I am satisfied with the benefits I receive in my current practice.	NS	0.012	NS	NS

NS= NO SIGNIFICANCE

$P \leq 0.05$

Table 7 (continued)

CORRELATIONS BETWEEN CAREER AND JOB SATISFACTION
AND PROMOTIONAL STATEMENTS

SATISFACTION
STATEMENTS

PROMOTIONAL STATEMENTS

	19. It is ADHA's responsibility to promote a career in dental hygiene.	21. Dental hygiene educators are in the best position to promote careers in dental hygiene.	25. Encouraging others to enter dental hygiene programs will only decrease salaries and chances for securing "better jobs".	35. I believe that dental hygiene will continue to exist as a profession in the year 2000.
1. I am satisfied with my career choice in dental hygiene.	NS	NS	NS	0.001
6. I am dissatisfied with my career choice in dental hygiene.	NS	NS	NS	0.029
12. I am satisfied with the variety of service I provide to my patients.	NS	0.049	NS	0.023
13. I find clinical practice discouraging because of the lack of opportunities for advancements.	0.039	0.034	0.034	0.056
17. I am satisfied with my earning potential as a dental hygienist.	NS	NS	NS	NS
27. I am satisfied with the benefits I receive in my current practice.	NS	NS	0.005	NS

NS = NO SIGNIFICANCE

$P \leq 0.05$

respondents agreed, while 7.9 percent (n=29) were undecided and 79.2 percent (n=289) disagreed (Appendix E). No demographic profile was obtained from this statement. No statistical correlations were found between statements 6 and demographic items (Table 6). Significant correlations were found between statement 6 and promotional statements 11 (I tell prospective candidates that dental hygiene is a desirable career), 14 (I tell my patients I am proud to be a dental hygienist), 15 (I take the responsibility to encourage interested candidates to pursue a career in dental hygiene), 18 (When asked, I discourage potential candidates from a career in dental hygiene), and 35 (I believe that dental hygiene will continue to exist as a distinct profession in the year 2000) (Table 7).

Statement 12: "I am satisfied with the variety of preventive services I provide to my patients." Approximately 75 percent (n=272) of the respondents agreed, while 9.1 percent (n=33) were undecided and 16.2 percent (n=59) disagreed (Appendix E). No demographic profile was extracted from this statement. Statistical correlations were found between statement 12 and demographic items, hours worked and current satisfaction (Table 6). Correlations were found between statement 12 and the following promotional statement: 11 (I tell prospective candidates that dental hygiene is a desirable career), 14 (I tell my patients I am proud to be a dental hygienist), 15 (I take the responsibility to encourage interested can-

didates to pursue a career in dental hygiene), 18 (When asked, I discourage potential candidates from a career in dental hygiene), 21 (Dental hygiene educators are in the best position to promote dental hygiene careers), and 35 (I believe that dental hygiene will continue to exist as a distinct profession in the year 2000) (Table 7).

Statement 13: "I am discouraged by clinical practice because of the lack of opportunities for advancement." Approximately 47 percent (n=171) of the respondents agreed, while 13.4 percent (n=49) were undecided and 39.7 percent (n=145) disagreed (Appendix E). The demographic profile of respondents who agreed with this statement held a baccalaureate or master's degree (n=93), graduated before 1980 (n=108), and were in clinical practice more than 6 years (n=144). Statistical correlations were found between statement 13 and demographic items educational degree, year graduated, years practiced, and current satisfaction (Table 6). Significant correlations were discovered between statement 13 and all promotional statements (Table 7).

Statement 17: "I am satisfied with my earning potential as a clinical dental hygienist." Over 50 percent (n=186) of the respondents agreed, while 15.1 percent (n=55) were undecided and 33.8 percent (n=123) disagreed (Appendix E). No specific profile was extracted from this statement. Correlations were found between statement 17 and demographic items age, educational degree, years practiced and current satis-

faction (Table 6). Significant correlations were found between statement 17 and the following promotional statements: 11 (I tell prospective candidates that dental hygiene is a desirable career), 14 (I tell my patients I am proud to be a dental hygienist), 15 (I take the responsibility to encourage interested candidates to pursue a career in dental hygiene) and 18 (When asked, I discourage potential candidates from a career in dental hygiene) (Table 7).

Statement 27: "I am satisfied with the benefits I receive in my current practice." Forty-one percent (n=149) of the respondents agreed, while 8.6 percent (n=31) were undecided and 50.1 percent (n=181) disagreed (Appendix E). Respondents between the ages of 20-30 (n=52) were shown to respond more favorably to this statement. No correlations were found between statement 27 and the demographic items (Table 6); however, significant correlations were found with the following promotional statements: 14 (I tell my patients I am proud to be a dental hygienist), and 25 (Encouraging others to enter dental hygiene programs will only decrease salaries and chances for securing "better jobs") (Table 7).

Research Question 3 Does the market supply/demand trend for dental hygienists influence dental hygienists' attitudes towards promoting a career in dental hygiene?

Statements 8, 24, 26, 31, 33, and 34 examined research question 3. Table 8 displays statistically significant correlations between market demand statements and demographic

items. Significant correlations between market demand statements and the promotional statements are displayed in Table 9.

Statement 8: "There are not enough dental hygienists in the market." Forty-nine percent (n=180) of the respondents agreed, while 22.98 percent (n=84) were undecided and 28.1 percent (n=103) disagreed (Appendix E). The demographic profile of respondents who agreed with this statement graduated from dental hygiene schools after 1980 (n=87). No statistical correlations were found between statement 8 and the demographic items (Table 8). Correlations were found between statement 8 and promotional statements 19 (It is ADHA's responsibility to promote a career in dental hygiene) and 25 (Encouraging others to enter dental hygiene programs will only decrease salaries and chances for "better jobs") (Table 9).

Statement 24: "There is a surplus of dental hygiene jobs in my community." Thirty-one percent (n=112) of the respondents agreed while 13.6 percent (n=50) were undecided and 55.9 percent (n=205) disagreed (Appendix E). No specific profile was obtained from this statement. Statistically significant correlations were found between statement 24 and demographic items age and hours employed (Table 8); however, no correlations were found between statement 24 and the promotional statements (Table 9).

Statement 26: "Many dental hygienists are departing clinical dental hygiene." Approximately, 56 percent (n=206)

Table 8

**CORRELATIONS BETWEEN THE SUPPLY/DEMAND TREND STATEMENTS
AND DEMOGRAPHIC ITEMS**

SUPPLY/DEMAND STATEMENTS

DEMOGRAPHIC ITEMS

	AGE	DEGREE	YEAR GRADUATED	YEARS PRACTICED	HOURS WORKED	SALARY	CURRENT SATISF.	ADHA STATUS
8. There are not enough dental hygienists in the market.	NS	NS	NS	NS	NS	NS	NS	NS
24. There is a surplus of dental hygiene jobs in my community.	0.004	NS	NS	NS	0.042	NS	NS	NS
26. Many dental hygienists are departing clinical practice.	NS	NS	NS	0.016	NS	NS	NS	NS
31. Many of my dental hygiene colleagues have departed from clinical practice.	NS	0.040	0.000	0.000	NS	NS	NS	NS
33. I have thought about leaving clinical practice.	NS	0.017	0.034	0.005	NS	NS	0.001	NS
34. I am concerned that the current supply of dental hygienists will not adequately serve the public.	NS	NS	NS	NS	NS	NS	NS	NS

NS= NO SIGNIFICANCE

 $P \leq 0.05$

Table 9

**CORRELATIONS BETWEEN SUPPLY/DEMAND TREND AND
PROMOTIONAL STATEMENTS**

**SUPPLY/DEMAND
STATEMENTS**

PROMOTIONAL STATEMENTS

	11. I tell prospective candidates that dental hygiene is a desirable career.	14. I tell my patients I am proud to be a dental hygienist.	15. I take the responsibility to encourage interested candidates to pursue a career in dental hygiene.	18. When asked, I discourage potential candidates from a career in dental hygiene.
8. There are not enough dental hygienists in the market.	NS	NS	NS	NS
24. There is a surplus of dental hygiene jobs in my community.	NS	NS	NS	NS
26. Many dental hygienists are departing clinical practice.	NS	NS	NS	0.032
31. Many of my dental hygiene colleagues are departing clinical practice.	0.001	NS	0.018	0.000
33. I have thought about leaving clinical practice.	0.000	0.000	0.000	0.000
34. I am concerned that the current supply of dental hygiene clinicians will not adequately serve the public.	NS	NS	NS	NS

NS= NO SIGNIFICANCE

$P \leq 0.05$

Table 9 (continued)

CORRELATIONS BETWEEN SUPPLY/DEMAND TREND AND
AND PROMOTIONAL STATEMENTS

SUPPLY/DEMAND STATEMENTS	PROMOTIONAL STATEMENTS			
	19. It is ADHA's responsibility to promote a career in dental hygiene.	21. Dental hygiene educators are in the best position to promote careers in dental hygiene.	25. Encouraging others to enter dental hygiene programs will only decrease salaries and "better jobs".	35. I believe that dental hygiene will continue to exist as a distinct profession in the year 2000.
8. There are not enough dental hygienists in the market	0.004	NS	0.030	NS
24. There is a surplus of dental hygiene jobs in my community.	NS	NS	NS	NS
26. Many dental hygienists are leaving clinical practice.	NS	NS	NS	NS
31. Many of my dental hygiene colleagues are leaving clinical practice.	NS	NS	NS	0.004
33. I have thought about leaving clinical practice.	NS	NS	NS	0.048
34. I am concerned that the current supply of dental hygienists will not serve the public.	0.001	NS	0.052	NS

NS= NO SIGNIFICANCE

$P \leq 0.05$

of the respondents agreed, while 30.9 percent (n=113) were undecided and 12.8 percent (n=47) disagreed (Appendix E). No specific profile was extracted from this statement. Statistical significance was found between statement 26 and the demographic item, years practiced (Table 8). A significant correlation was found between statement 26 and promotional statement 18 (When asked, I discourage potential candidates from a career in dental hygiene) (Table 9).

Statement 31: "Many of my dental hygiene colleagues have departed from clinical practice." Approximately 43 percent (n=156) agreed, while 15.3 percent (n=56) were undecided and 42.2 percent (n=155) disagreed (Appendix E). The demographic profile of the respondents who agreed with this statement held a baccalaureate or master's degree (n= 85); were in practice between 6-10 years (n=53), 11-15 years (n=44), 16-20 years (n=31); and graduated from dental hygiene school between 1966-1970 (n=12), 1971-1975 (n=39), 1976-1980 (n=42). Statistical correlations were discovered between statement 31 and demographic items educational degree, years practiced and year graduated (Table 8). Significant correlations were found between statement 31 and promotional statements 11 (I tell prospective candidates that dental hygiene is a desirable career), 15 (I take the responsibility to encourage interested candidates to pursue a career in dental hygiene), 18 (When asked, I discourage potential candidates from a career in dental hygiene) and 35 (I believe that dental hygiene will

continue to exist as a distinct profession in the year 2000) (Table 9).

Statement 33: "I have thought about leaving clinical practice." Forty-seven percent (n=173) of the respondents agreed, while 9.6 percent (n=35) were undecided and 43 percent (n=157) disagreed (Appendix E). The demographic profile of respondents who agreed with this statement were between the ages 31-35 (n=39), 36-40 (n=23), held a baccalaureate or master's degree (n=95), in practice 6-10 years (n=63), 11-15 (n=38), 16-20 (n=34), graduated dental hygiene school between 1971-1975 (n=33) 1976-1980 (n=47), and were nonmembers of ADHA (n=110). Statistical correlations were found between statement 33 and demographic items educational degree, year graduated, years practiced and current satisfaction (Table 8). Significant correlations were found between statement 33 and the following promotional statements: 11 (I tell prospective candidates that dental hygiene is a desirable career), 14 (I tell my patients I am proud to be a dental hygienist), 15 (I take the responsibility to encourage interested candidates to pursue a career in dental hygiene), 18 (When asked, I discourage potential candidates from a career in dental hygiene) and 35 (I believe that dental hygiene will continue to exist as a distinct profession in the year 2000) (Table 9).

Statement 34: "I am concerned that the current supply of dental hygiene clinicians will not adequately serve the public." Forty-two percent (n=154) of the respondents agreed,

while 30.5 percent (n=112) were undecided and 27.5 percent (n=101) disagreed (Appendix E). No demographic profile was obtained from this statement. No statistical correlations were found between statement 34 and the demographic items (Table 8). However, significant correlations were found between statement 34 and promotional statements 19 (It is ADHA's responsibility to promote a career in dental hygiene), and 25 (Encouraging others to enter dental hygiene programs will only decrease salaries and chances for "better jobs") (Table 9).

Research Question 4 What is the degree of responsibility perceived by dental hygienists towards promoting their profession?

Statements 11, 14, 15, 18, 19, 21, 25 and 35 examined research question 4. Statistically significant correlations between the promotional statements and demographic items are presented in Table 10.

Statement 11: "I tell prospective candidates that dental hygiene is a desirable career." Approximately 80 percent (n=291) of the respondents agreed, while 10.1 percent (n=37) were undecided and 10.6 percent (n=39) disagreed (Appendix E). No specific profile was obtained from this statement. Significance was found between statement 11 and demographic item current job satisfaction (Table 10).

Statement 14: "I tell my patients that I am proud to be a dental hygienist." Eighty-two percent (n=300) of the

Table 10

CORRELATIONS BETWEEN THE PROMOTIONAL STATEMENTS AND DEMOGRAPHIC ITEMS

PROMOTIONAL STATEMENTS

DEMOGRAPHIC ITEMS

	AGE	DEGREE	YEAR GRAD.	YEARS PRACT.	HOURS WORKED	SALARY	CURRENT SATISF.	ADHA STATUS
11. I tell prospective candidates dental hygiene is a desirable career.	NS	NS	NS	NS	NS	NS	0.000	NS
14. I tell my patients I am proud to be a dental hygienist.	NS	NS	NS	NS	NS	NS	NS	NS
15. I take the responsibility to encourage interested candidates to pursue a career in dental hygiene.	0.006	NS	NS	0.055	NS	NS	0.000	NS
18. When asked, I discourage potential candidates from a career in dental hygiene.	0.055	NS	NS	0.040	NS	NS	NS	NS
19. It is ADHA's responsibility to promote a career in dental hygiene.	NS	NS	0.021	0.000	NS	NS	NS	0.024
21. Dental hygiene educators are best position to promote careers in dental hygiene.	NS	NS	NS	NS	NS	NS	NS	NS
25. Encouraging others to enter dental hygiene programs will only decrease salaries and chances for securing "better jobs".	NS	NS	NS	NS	NS	NS	NS	NS
35. I believe dental hygiene will continue to exist as a distinct profession in the year 2000.	NS	NS	NS	NS	NS	NS	NS	NS

NS = NO SIGNIFICANCE

 $P \leq 0.05$

respondents agreed, while 8.0 percent (n=29) were undecided and 9.6 percent (n=35) disagreed (Appendix E). No demographic profile was extracted from this statement. No statistical correlations were found between statement 14 and the demographic items (Table 10).

Statement 15: "I take the responsibility to encourage interested candidates to pursue a career in dental hygiene." Over 74 percent (n=273) of the respondents agreed, while 15.3 percent (n=56) were undecided and 10.4 percent (n=38) disagreed (Appendix E). Statistically significant correlations were found between statement 15 and demographic items age, years practiced, and current satisfaction (Table 10). The demographic profile of respondents who agreed with statement 15 were in practiced between the years of 5 years or less (n=71), 6-10 years (n=86), 11-15 years (51), 21 years or more (n=62); within all the age ranges; and currently satisfied with present employment situation.

Statement 18: "When asked, I discourage potential candidates from a career in dental hygiene." Only 7.6 percent (n=28) of the respondents agreed, while 7.9 (n=29) were undecided and 84.5 percent (n=310) disagreed (Appendix E). A statistical significance was found between statement 18 and demographic item years practiced (Table 10). The profile of respondents who agreed with this statements were in practice 5 years or less (n=1), 6-10 years (n=7), 11-15 years (n=7) and 21 years or more (n=13).

Statement 19: "It is ADHA's responsibility to promote a career in dental hygiene." Approximately 50 percent (n=179) of the respondents agreed, while 27.3 percent (n=100) were undecided and 23.8 percent (n=87) disagreed (Appendix E). No profile was extracted from this statement. Statistical correlations were found between statement 19 and demographic items years graduated, years practiced, and ADHA membership status (Table 10).

Statement 21: "Dental hygiene educators are in the best position to promote careers in dental hygiene." Forty-eight percent (n=174) of the respondents agreed, while 26.6 percent (n=97) were undecided and 25.8 percent (n=94) disagreed (Appendix E). No profile was concluded from this statement. No statistical correlations were discovered between statement 21 and the demographic items (Table 10).

Statement 25: "Encouraging others to enter dental hygiene programs will only decrease salaries and chances for securing "better jobs"." Only 8.2 percent (n=30) respondents agreed, while 17.7 percent (n=65) were undecided and 74.1 percent (n=272) disagreed (Appendix E). No profile was extracted from this statement. No correlations were found between statement 25 and the demographic items (Table 10).

Statement 35: "I believe that dental hygiene will continue to exist as a distinct profession in the year 2000." Seventy percent (n=257) of the respondents agreed, while 21.3 percent (n=78) were undecided and 8.7 percent (n=32) disagreed

(Appendix E). No profile was extracted from this statement and no correlations were found between statement 35 and the demographic items (Table 10).

Research Question 5 Does professional affiliation with ADHA influence dental hygienists' attitudes towards promoting dental hygiene as a career?

Statements 7, 20, 22, 23, 30 and 32 examined research question 5. Statistical significance between professional affiliation and demographic items are presented in Table 11. Table 12 contains significant correlations between professional affiliation statements and the promotional statements.

Statement 7: "I feel it is my professional responsibility to belong to the ADHA." Approximately 46 percent (n=166) of the respondents agreed, while 27.1 percent (n=100) were undecided and 27.1 percent (n=99) disagreed (Appendix E). The demographic profile of the respondents who agreed with this statement held an certificate/associate degree (n=78), baccalaureate (n=72), and master's degree (n=15); in practice 5 years or less (n=39), 6-10 years (n=46), 11-15 (n=36) and 21 or more years (n=42); members of ADHA (n=121); and satisfied with current employment situation. Statistical correlations were found between statement 7 and demographic items educational degree, years practiced, ADHA membership status and current job satisfaction (Table 11). Significant correlations were found between statement 7 and promotional statements 19 (It is ADHA's responsibility to promote a career in dental

Table 11

**CORRELATIONS BETWEEN PROFESSIONAL AFFILIATION STATEMENTS
AND DEMOGRAPHIC ITEMS**

PROFESSIONAL AFFILIATION STATEMENTS	DEMOGRAPHIC ITEMS							
	AGE	DEGREE	YEAR GRAD.	YEARS PRACT.	HOURS WORKED	SALARY	CURRENT SATISF.	ADHA STATUS
7. I feel it is my professional responsibility to belong to ADHA.	NS	0.044	NS	0.046	NS	NS	0.045	0.000
20. I believe professional advancement is or can be achieved by joining ADHA.	NS	NS	NS	NS	NS	NS	NS	NS
22. I am familiar with the membership package offered by ADHA.	NS	NS	NS	NS	NS	NS	NS	0.000
23. The membership benefit package offered does not suit my needs.	0.000	NS	0.001	0.000	NS	0.005	NS	NS
30. ADHA can function adequately without the support of membership.	NS	NS	NS	NS	NS	NS	NS	0.000
32. ADHA is an influential force in determining the future of dental hygiene.	NS	NS	NS	NS	NS	NS	NS	0.000

NS= NO SIGNIFICANCE

 $P \leq 0.05$

hygiene careers), and 21 (Dental hygiene educators are in the best position to promote careers in dental hygiene) (Table 12).

Statement 20: "I believe professional advancement is achieved by joining ADHA." Only 28.3 percent (n=104) of the respondents agreed, while 34.1 percent (n=125) were undecided and 37.6 percent (n=138) disagreed (Appendix E). No statistical correlations were found between statement 20 and the demographic items. Significant correlations were discovered between statement 20 and promotional statements 14 (I tell my patients I am proud to be a dental hygienist), 15 (I take the responsibility to encourage interested candidates to pursue a career in dental hygiene), 19 (It is ADHA's responsibility to promote a career in dental hygiene), 21 (Dental hygiene educators are in the best position to promote careers in dental hygiene) and 25 (Encouraging others to enter dental hygiene programs will only decrease salaries and chances for "better job") (Table 12).

Statement 22: "I am familiar with the membership package benefit package offered by ADHA." Over 60 percent of the respondents agreed (n=221), while 15.6 percent (n=57) were undecided and 24.0 percent (n=88) disagreed (Appendix E). A statistical significance was found between statement 22 and ADHA membership status (Table 11). No demographic profile was extracted from this statement, both ADHA members and nonmembers agreed with this statement. These results indicate

Table 12

CORRELATIONS BETWEEN PROFESSIONAL AFFILIATION
AND PROMOTIONAL STATEMENTS

PROFESSIONAL AFFILIATION STATEMENTS	PROMOTIONAL STATEMENTS			
	11. I tell prospective candidates that dental hygiene is a desirable career.	14. I tell my patients I am proud to be a dental hygienist.	15. I take the responsibility to encourage interested candidates to pursue a career in dental hygiene.	18. When asked, I discourage potential candidates from a career in dental hygiene.
7. I feel it is my professional responsibility to join ADHA.	NS	NS	NS	NS
20. I believe professional advancement is achieved by joining ADHA.	NS	0.033	0.033	NS
22. I am familiar with the membership benefit package offered by ADHA.	NS	NS	NS	NS
23. The membership benefit package offered by ADHA does not suit my needs.	NS	NS	NS	NS
30. ADHA can function adequately without the support of membership.	NS	0.000	NS	NS
32. ADHA is an influential force in determining the future of dental hygiene.	NS	NS	NS	NS

NS = NO SIGNIFICANCE $P \leq 0.05$

Table 12 (continued)

**CORRELATIONS BETWEEN PROFESSIONAL AFFILIATION
AND PROMOTIONAL STATEMENTS**

PROFESSIONAL AFFILIATION STATEMENTS	PROMOTIONAL STATEMENTS			
	19. It is ADHA's responsibility to promote a career in dental hygiene.	21. Dental hygiene educators are in the best position to promote careers in dental hygiene.	25. Encouraging others to enter dental hygiene programs will only decrease salaries and chances for securing "better jobs".	35. I believe dental hygiene will continue to exist as a distinct profession in the year 2000.
7. I feel it is my professional responsibility to join ADHA.	0.000	0.043	NS	NS
20. I believe professional advancement is achieved by joining ADHA.	0.000	0.001	0.016	NS
22. I am familiar with the membership benefit package offered by ADHA.	NS	NS	NS	NS
23. The membership benefit package offered by ADHA does not suit my needs.	NS	NS	NS	NS
30. ADHA can function adequately without the support of membership.	NS	NS	0.010	NS
32. ADHA is an influential force in determining the future of dental hygiene.	0.009	NS	NS	0.007

NS= NO SIGNIFICANCE

 $P \leq 0.05$

that regardless of membership status, respondents were familiar with the membership offerings offered by ADHA. No significant correlations were found between statement 22 and promotional statements (Table 12).

Statement 23: "The membership benefit package offered by ADHA does not suit my needs." Thirty percent (n=108) of the respondents agreed, while 42.2 percent (n=168) were undecided and 24.2 percent (n=88) disagreed (Appendix E). Statistical correlations were found between statement 22 and demographic items age, year graduated, years practiced, and salary (Table 11). The demographic profile of respondents who were undecided were less than 46 years of age (n=160); in practice less than 15 years (n=139); graduated dental hygiene school after 1975 (n=130); and earning a salary of more than 15,000 a year (n=130). These results indicate the current populace of dental hygienists were uncertain as to whether the membership package offered by ADHA was appealing enough to warrant membership. No significant correlations were found between this statement and promotional statements (Table 12).

Statement 30: "ADHA can function adequately without the support of membership." Only 1.4 percent (n=5) of the respondents agreed, while 17.8 percent (n=65) were undecided and 80.9 percent (n=296) disagreed (Appendix E). As the majority of respondents disagreed with this statement, no profile was extracted. Significance was found between statement 30 and the demographic item, ADHA membership status (Table 11).

Table 13 shows the number of responses to statement 30 compared to ADHA membership and nonmembership. These results show that regardless of membership status, the majority of respondents believe ADHA cannot function without membership support. Significant correlations were found between statement 30 and promotional statements 14 (I tell patients I am proud to be a dental hygienist), and 25 (Encouraging others to enter dental hygiene programs will only decrease salaries and chances for "better jobs") (Table 12).

Statement 32: "ADHA is an influential force in determining the future of dental hygiene." Seventy percent (284) of the respondents agreed, while 18.4 percent (67) were undecided and 3.6 percent (13) disagreed (Appendix E). Significance was found between this statement and demographic item ADHA membership status (Table 11). Table 14 displays responses of ADHA members and nonmembers to statement 32. Results showed that regardless of ADHA membership status, the majority of ADHA members and nonmembers believed ADHA was an influential force in determining dental hygiene's future. Significant correlations were found between statement 32 and promotional statements 19 (It is ADHA's responsibility to promote a career in dental hygiene), and 35 (I believe that dental hygiene will continue to exist as a distinct profession in the year 2000) (Table 12).

Lastly, statement 10, "Patients often ask my opinion about pursuing a career in dental hygiene", did not related to

Table 13

**DENTAL HYGIENISTS ATTITUDES ABOUT WHETHER ADHA CAN FUNCTION WITHOUT
MEMBERSHIP CATEGORIZED BY MEMBERSHIP STATUS**

	ADHA MEMBERS	ADHA NONMEMBERS	TOTAL
DISAGREE	36 PERCENT (N = 131)	45 PERCENT (N = 162)	81 PERCENT (N = 293)
UNDECIDED	1 PERCENT (N = 5)	17 PERCENT (N = 60)	18 PERCENT (N = 65)
AGREE	1 PERCENT (N = 3)	1 PERCENT (N = 2)	1 PERCENT (N = 5)
TOTAL	139	224	363

Table 14

DENTAL HYGIENISTS ATTITUDES ABOUT ADHA AS AN INFLUENTIAL FORCE IN DETERMINING
THE FUTURE AS CATEGORIZED BY THEIR MEMBERSHIP STATUS

	ADHA MEMBER	ADHA NONMEMBER	TOTAL
DISAGREE	1 PERCENT (N=3)	3 PERCENT (n=10)	4 PERCENT (n=13)
UNDECIDED	3 PERCENT (n=10)	16 PERCENT (n=56)	18 PERCENT (n=66)
AGREED	35 PERCENT (n=125)	44 PERCENT (n=157)	78 PERCENT (n=282)
TOTAL	138	223	361

the research questions, however, was essential in understanding the degree of public interest in dental hygiene as a career. Only 38.5 percent (n=139) of the respondents agreed with statement 10, 8.9 percent (n=32) and 52.6 percent (n=190) disagreed (Appendix E).

Discussion

Sample

The majority of the sample respondents were between the ages of 25-40, currently employed and were in clinical practice between 5-15 years. Results confirm previous research which verified that dental hygienists remain in the work force, regardless of marriage, child bearing and child rearing responsibilities (Sodano and Javian 562). Employed between 31-40 hours a week, which is considered "full-time" within the dental community, dental hygienists perceive dental hygiene as a career rather than a job; a finding contrary to the earlier findings of Gurenlian and Scranton (456).

The majority of respondents (52 percent) held an associate degree, however, almost 43 percent of the sample held a baccalaureate degree. Proponents who wish to mandate the baccalaureate degree as a minimum entry requirement into dental hygiene would be encouraged by this information. Professional credibility is thought to be attained by implementing the baccalaureate degree as the entry level credential. Results suggest that a segment of the sample

population was interested in not only advancing their academic futures, but, inadvertently in the future of dental hygiene. Finally, the majority of the sample respondents were not members of ADHA confirming the literature which states that nationally, only one-third of dental hygienists are ADHA members (ADHA Who Are We 14). Previous research states that the perceived high membership fee is the major factor limiting ADHA membership (14). Results of this investigation concurred with previous studies which found this to be the primary reason deterring dental hygienists from joining ADHA. Confirming previous research, this study found respondents who were nonmembers of ADHA, had been members at one time (14). Approximately one-fourth of the 226 ADHA nonmembers in this study, were former ADHA members. Results were based on comments enclosed by respondents who expressed their dissatisfaction with ADHA. As the survey did not request respondents to provide their prior ADHA membership history, the number of former members could have been greater. Although the perceived high membership dues appears to be the major reason preventing membership, dental hygienists have been known to earn salaries that would allow them to afford membership dues. Comments offered by approximately 10 percent of the respondents provided one perspective on low membership levels and perception of high membership dues (See Appendix F). Respondents expressed dissatisfaction with local association components. Respondents' perceptions of ADHA was

through their association experience at the local level. Disinterest in membership was stated because respondents were disappointed with the leadership and lack of organizational abilities found on the local level. Dental hygienists who were disillusioned by their local component felt it was not worth becoming a member, which would explain why the membership dues were perceived as high. Unfortunately, this attitude precludes dental hygienists from profiting in the benefits achieved through membership support at the state and national level. Further research is needed to investigate dental hygienists' attitudes towards ADHA.

Research Questions

The following discussion was based on the results found relevant to the purpose of this investigation. The purpose of this investigation was to determine whether dental hygienists promote dental hygiene as a desirable career. Promotional statements 11 (I tell prospective candidates dental hygiene is a desirable career), 15 (I take the responsibility to encourage interested candidates to pursue a career in dental hygiene), and 18 (When asked, I discourage potential candidates from a career in dental hygiene) were designed to describe dental hygienists' promotional behaviors. The focus of discussion therefore highlights correlations between attitudinal statements and promotional statements 11, 15, and 18. Significance found between promotional statements 14 (I tell

my patients I am proud to be a dental hygienist), 19 (It is ADHA's responsibility to promote a career in dental hygiene), 21 (Dental hygiene educators are best to promote careers in dental hygiene), 25 (Encouraging others to enter dental hygiene programs will only decrease salaries and chances for securing "better jobs"), and 35 (I believe dental hygiene will continue to exist as a distinct profession in the year 2000), and influential statements were only addressed when the researcher thought correlations were logical and relevant. A discussion on statement 10 which refers to whether patients ask dental hygienists their opinion on pursuing dental hygiene as a career is also included.

Does the image of the profession of dental hygiene influence promotion efforts by dental hygienists?

Three image-related statements that consistently displayed statistical correlations with promotional statements were: patients regard me as a professional, status and prestige are associated with being a dental hygienist, and dental hygiene is more than a job; it is my career. Therefore, these statements were considered influential factors in dental hygienists' decision to promote careers in dental hygiene. Responses to image statements confirmed previous research which states dental hygienists' perceive themselves as "professionals" (Darby and Schwartz 271; Rose-Sutton 166). Believing in and personifying the professional image sought by

dental hygiene, respondents were, therefore, promoting dental hygiene as a desirable career.

Previous research found dental hygiene is perceived as secondary to dentistry (Darby and Schwartz 271; Hamby 1237). This investigation found similar results. Sixty-one percent of respondents agreed with the statement, "The practice of dental hygiene is considered secondary to dentistry". The literature maintains that the public perceives dental hygienists as "tooth cleaners". (Kvix 22; Boyer 17). This investigation also found similar results. Sixty percent of the respondents agreed that the public perceives dental hygienists as "toothcleaners". Data implies the need for both internal and external marketing by the profession of dental hygiene in order to replace this negative, technical image of dental hygiene with a more accurate one, e.g., dental hygienist as preventive oral health specialist. As no significant correlations were found between image statements regarding dental hygiene as second place to dentistry and dental hygienists as "toothcleaners", and the promotional statements, these statements were not considered influential factors in dental hygienists' decision to promote careers in dental hygiene.

Does career satisfaction or dissatisfaction influence practitioners' attitudes towards promoting their profession?

The literature maintains that overall career and job satisfaction exists among dental hygienists (Boyer 170). This investigation confirmed the literature and found that career

and job satisfaction were the most influential factors in dental hygienists' decision to promote dental hygiene as a desirable career.

Eighty-two percent of the respondents were satisfied with dental hygiene as a career choice, 13 percent dissatisfied, and 70 percent satisfied with current job situation. Correlations were found between satisfaction with career choice and job situation and promotional statements. This data suggests that dental hygienists can be used as effective promoters of dental hygiene careers among potential applicants. Perhaps the American Dental Association, as part of its internal marketing campaign, could convince dental hygienists of the valuable role they can play in this area.

The literature states that dissatisfaction exists among dental hygienists with the variety of services they provide to patients (Adelson, et al 25; Deckard, et al 307; Farrugia 300; Heine, et al 22; Heine-Drazin, et al 117; Hunter and Rossman 559; Lawson, et al 74; McAdams 563). Contrary to the literature, this study found 75 percent of the respondents expressed satisfaction with the variety of services provided to patients. Additionally, as "satisfaction with variety of services provided" was found correlated with promotional statements, this was considered an influential factor in dental hygienists' decision to promote careers in dental hygiene. Perhaps this reflects a gradual change in dental hygiene role expansion as well as the current consumer em-

phasis on healthy lifestyles, nutrition, disease prevention and selfcare - all elements of the services provided by dental hygienists. In essence, dental hygienists might be experiencing greater satisfaction than in the past as a result of the value consumer place on dental hygiene services.

This investigation also confirmed previous research which found that dental hygienists were discouraged with clinical practice because of the lack of opportunities for advancement (Adelson 25; Deckard 307; Farrugia 300; 117; 559; 74; 563). Approximately 47 percent of respondents agreed that "clinical practice is discouraging". As stated in the literature, this investigation also found the profile of dental hygienists who were discouraged by clinical practice held higher educational degrees, graduated before 1980, and were in practice for more than 6 years. Correlations were found between "discouraged by clinical practice" and all the promotional statements, indicating this to be an influential factor in dental hygienists' promotional decision. Perhaps greater emphasis should be placed on expanding nontraditional dental hygiene roles so that dental hygienists could attain these roles and achieve greater satisfaction and opportunity for career growth.

Satisfaction with earning potential and benefits received in current practice were addressed respectively. Fifty-one percent of the respondents in this investigation were satisfied with their earning potential, yet 50 percent were dissatisfied with their current benefits. Interestingly, a sig-

nificant correlation was found between potential earnings and promotion but none was found between potential benefits and promotion. This might have been due to the fact that historically dental hygiene career appeal has been influenced more by potential earnings than by any potential benefits received. With societal trends such as the increase in the number of women who are heads of households, the importance of salary and benefits in dental hygiene, a traditionally woman's profession, assumes new importance. The issue of salary and benefits will continue to be a major issue in attracting and retaining dental hygienists in the job market.

Does the market supply/demand trend for dental hygienists influence hygienists' attitudes towards promoting a career in dental hygiene?

Forty-nine percent of respondents agreed that not enough dental hygienists existed in the market; however 56 percent of the respondents agreed that no surplus of dental hygiene jobs existed in their communities. These results show the sample population may have been influenced by the undocumented dental hygiene manpower shortage advanced by organized dentistry. A surplus would have indicated a need for more dental hygienists to fill vacant positions. The majority of respondents cited that no surplus existed, suggesting that dental hygienists perceive that enough dental hygienists are available to meet market demand. The inconsistencies with these related statements imply dental hygienists may have been influenced by this

rumor. The dental hygiene association needs to ensure that accurate data about manpower is disseminated to member and nonmember dental hygienists. Perhaps nonmember dental hygienists are more susceptible to misinformation about dental hygiene manpower circulated by dentists than are dental hygienists who are members of the professional association. Further research needs to be conducted to determine the effects of this rumor.

The only significant correlations found between, "there are not enough dental hygienists in the market" and the promotional statements were, "ADHA is responsible for promoting dental hygiene careers", and "encouraging dental hygiene careers will only reduce chances for "better jobs." The researcher had difficulty deciphering a logical interpretation for these correlations, however provides the following theories. If respondents believed there was a serious shortage of available dental hygienists in the market, ADHA may have been perceived as better equipped in promoting careers in dental hygiene on a larger, national scale. In response to the statement about "reduced chances for better jobs", 85 percent of the respondents in this study expressed satisfaction with their current employment situation. Contented with their present employment, respondents were probably not seeking other employment, therefore not threatened by the likelihood of this happening.

Referring to the statement regarding the departure of dental hygiene practitioners from clinical practice, 56 percent of the respondents agreed that many dental hygienist have left clinical practice. Forty-three percent of the respondents agreed dental hygiene "colleagues" have left clinical practice, and 42 percent disagreed. Interestingly, statistical correlations were found between promotional statements and dental hygienists "personal experience" with colleagues who left clinical practice. Correlations were not found, however, between promotional statements and dental hygienists' general knowledge of dental hygienists who left clinical practice. The influence of practitioner attrition from clinical practice on dental hygienists' promotional attitudes appeared to be objective, i.e., knew "colleagues" who departed clinical practice, rather than subjective i.e., general knowledge of dental hygienists who departed clinical practice. Dental hygienists personal experience with colleagues who left clinical practice was considered influential in dental hygienists' decision to promote careers in dental hygiene. The profile of respondents whose colleagues have left clinical practice were between the ages of 31-45, held a bachelors or master's degree, in practice for longer than 6 years and graduated from dental hygiene school between 1966-1980. This profile also represented respondents who themselves thought about leaving clinical practice.

Forty-seven percent of the respondents considered leaving clinical practice. A significant correlation was found between this statement and the promotional statements. Therefore, this statement was considered influential in dental hygienists' decision to promote careers in dental hygiene. The profile of these dental hygienists was similar to those practitioners who were dissatisfied by the limitations with clinical practice. Understandably, if a practitioner thought about leaving because he/she was dissatisfied with clinical practice, this would greatly influence his/her attitude towards promoting a career in dental hygiene.

Although the majority of respondents agreed that the current supply of available dental hygienists will not serve the public, a significant number of respondents indicated uncertainty as to whether a dental hygiene manpower shortage actually existed. The literature states Virginia is not experiencing a shortage but rather a "maldistribution" problem (Nielson 5). Therefore as discussed previously, these results indicated that respondents might have been influenced by the dental hygiene manpower shortage rumor. Evidence supporting this theory were noted in the results to the statement, "there are not enough dental hygienists in the market", and "there is a surplus of dental hygiene jobs in my community". Results showed contradictory responses to these related statements. The majority of the sample population disagreed with the evidence of any surplus jobs, therefore, there must have been

an adequate supply of dental hygienists to have met employment demands. However, the majority of respondents believed there were not enough dental hygienists in the market, indicating respondents may have been influenced by the rumor of a dental hygiene manpower shortage. Finally, since no relevant correlations were found between the "concerns with the current supply of dental hygienists" and promotional statements, this was not considered an influential factor in dental hygienists' decision to promote careers in dental hygiene.

What is the degree of responsibility perceived by dental hygienists towards promoting their profession?

The only documentation found in the literature which examined dental hygienists' attitudes towards promoting dental hygiene as a desirable career was a study conducted by Keevil (11). Keevil (11) conducted a five year follow up investigation which investigated dental hygienists' attitudes regarding their profession. Keevil (11) found that the dental hygienists who expressed an interest in recommending dental hygiene as a desirable career dropped from 88.3 percent in 1974 to 79.6 percent in 1979. The primary factors Keevil (11) found that respondents gave for not recommending careers in dental hygiene were 1) career limited in growth and development, 2) dental hygiene not intellectually stimulating, and 3) too many dental hygienists in the market. Of these reasons, the perception that there are too many dental hygienists has significantly changed since Keevil's study (11).

The present investigation found that 80 percent of the respondents agreed with the statement, "I tell prospective applicants dental hygiene is a desirable career", while 74 percent agreed with the statement, "I encourage careers in dental hygiene", while only 7.6 percent agreed with the statement, "I discourage careers in dental hygiene". Results suggest that dental hygienists do recommend dental hygiene as a desirable career. Attitudes towards promotion appear to have notably changed since Keevil's (11) study. Again, the dental hygiene manpower rumor may have also influenced this interest in promoting dental hygiene. Dental hygienists may have felt professionally obliged to promote careers in dental hygiene if they believed that society was denied proper dental hygiene care due to a shortage of dental hygienists.

The statements, "ADHA is responsible to promote dental hygiene careers", and "educators are in the best position to promote dental hygiene careers" addressed the responsibility of promoting dental hygiene. The majority of the respondents agreed that ADHA and dental hygiene educators were responsible for promoting dental hygiene. Thus, the findings imply that respondents believe that all factions of dental hygiene (educators, ADHA and practitioners) were equally responsible for career promotion.

From the mid 1970s to the mid 1980s, dental hygienists experienced the effects of a saturated employment market. The number of attractive employment possibilities and salaries

decreased and job security was poor. The statement, "encouraging dental hygiene careers will only reduce chances for "better jobs" was designed to determine whether respondents felt threatened by the likelihood of this employment situation happening again. Results showed that the majority of respondents disagreed with this statement, implying that they felt no threat. As previously discussed, 82 percent of the respondents were satisfied with their present job. Dental hygienists were probably not considering a job change, thus, did not feel threatened by this occurrence.

Lastly, 78 percent of the respondents believed that dental hygiene will continue to exist as a distinct profession in the year 2000. These results suggest that respondents were optimistic regarding dental hygiene's "professional future".

Does professional affiliation with ADHA influence dental hygienists' attitudes towards promoting dental hygiene as a career?

A professional association is comprised of and governed by its professional members and is the underlying force that collectively unites its members. A professional organization is responsible for implementing strategies for professional development and advancement. Statements corresponding to professional affiliation were designed to determine the attitudes dental hygienists held towards ADHA and whether correlations existed between these attitudes and dental hygienists' promotional efforts.

Forty percent of the respondents agreed with the statement, "I feel it is my professional responsibility to belong to ADHA". Of the 40 percent who agreed, cross tabulations showed that 38 percent were ADHA members. As no statistical correlations were found between this statement and the promotional statements, this was not considered an influential factor in dental hygienists' decision to promote careers in dental hygiene.

Only 28 percent of the respondents believed professional advancement is achieved by joining ADHA while 34 percent were undecided and 37 percent disagreed. Results showed that respondents did not perceive ADHA membership as an integral factor in facilitating professional advancements. A statistical correlation was found between this statement and the promotional statement, "I encourage careers in dental hygiene." These results suggest that regardless of dental hygienists' attitudes towards achieving professional advancements or ADHA, they promote dental hygiene as a desirable career.

Interestingly, the majority of respondents believed, "ADHA is an influential force in determining the future of dental hygiene." Results showed that regardless of association status, the majority of ADHA members and nonmembers believed ADHA was an influential force in determining dental hygiene's future. However, a minority (38 percent) of the respondents in the sample population were ADHA members. These

results suggested that the majority, (62 percent) of the respondents placed the responsibility of determining dental hygiene's future in the hands of the minority. Also, it is interesting to note that while 78 percent of the respondents felt ADHA was influential in determining dental hygiene's future, only 28 percent believed that professional advancement was achieved by joining ADHA. If a professional organization is responsible for attaining professional advancements, the data shows a contradiction in respondents' attitudes towards ADHA. These results suggest that although respondents believed ADHA was influential in determining dental hygiene's future they cited that membership support was not an integral factor in ADHA's endeavor in determining dental hygiene's future. A professional organization can only function effectively with membership support. Therefore, these contradictory responses indicate further research needs to be conducted to determine dental hygienists' attitudes held towards their profession, its future and ADHA. As no statistical correlations were found between the influence of ADHA in determining dental hygiene's future and the promotional statements, this was not considered an influential factor in dental hygienists' decision to promote careers in dental hygiene.

Additionally, results further showed that regardless of membership status, the majority of respondents believed ADHA cannot function without membership support. Interestingly, 45 percent of the nonmembers disagreed that ADHA can function

without the support of membership. Again data revealed a contraction in the respondents' attitudes towards the "functioning of ADHA". Data showed that although dental hygienists' may advocate "membership support", their behavior demonstrates "nonsupport". These contradictory results further justifies the need to conduct research to determine the attitudes and expectations held by dental hygienists towards ADHA.

Finally, respondents claimed to be familiar with membership benefits. It is interesting to note, that 42 percent of the respondents were undecided as to whether the benefits met their needs. While the majority of the sample population were nonassociation members, these results suggest the majority of the respondents question the membership benefits offered by ADHA. Further research needs to be conducted to determine the attitudes and expectations held by dental hygienists towards their professional organization. Also, these findings suggest that the ADHA needs to design effective marketing strategies to publicize its membership offerings. An extensive campaign promoting the tangible benefits (insurance, continuing education course discounts, journal) and more importantly the intangible benefits (lobbying, standard setting, professional support) may enlighten and encourage dental hygienists to join ADHA.

"Patients often ask my opinion about pursuing careers in dental hygiene"

The last item of interest addressed whether the public consulted dental hygienists for advice on career opportunities in dental hygiene. Results found that only 38 percent of the respondents were consulted, the majority of the sample population were not consulted. These results appear to suggest that career seeking individuals did not seek counsel from the dental hygienist about dental hygiene careers because of either disinterest or unfamiliarity with dental hygiene as a desirable career choice. These results further indicate that dental hygienists need to initiate public awareness by voluntarily promoting and enlightening the public to dental hygiene is a desirable career choice.

This investigation did ascertain that the majority of dental hygienists do encourage and do promote dental hygiene as a desirable career, "when asked by prospective candidates". However, this study did not directly establish whether dental hygienists electively promote, enlighten, and encourage the public to career possibilities in dental hygiene. Although the investigation determined that dental hygienists felt a "responsibility towards promoting dental hygiene as a desirable career, it did not ascertain whether dental hygienists were truly cognizant of their potential promotional position. The literature states, "the best marketers are seen as those knowledgeable about the offerings " (careers in dental hy-

giene) (Kotler and Andreasen 45). Practicing dental hygienists, directly involved with the public have the ideal opportunity to educate electively and generate public interest about the dental hygiene profession. Dental hygienists must be educated and encouraged to take full advantage and utilize their potential for themselves and the profession. Further research needs to be conducted to determine whether dental hygienists are aware of their potential promotional position and whether they are electively promoting careers in dental hygiene. Also, effective marketing strategies need to be designed and implemented to inform and attract applicants.

CHAPTER 5

Summary and Conclusions

Currently the profession of dental hygiene is experiencing a decline in the number of applicants to its educational programs. The decrease in the college age population and increase in the concern for the contraction of infectious diseases have helped to dissuade potential candidates from entering dental hygiene programs. Furthermore, with the increase in demand for dental hygienists, there is concern over the problem of practitioner attrition from clinical practice as a result of unacceptable employment conditions. These and other circumstances have fostered rumors of a dental hygiene shortage, an inadequate supply of available dental hygienists to meet consumer needs and have encouraged the concept of legalizing preceptor-trained dental hygienists. Because of these trends, dental hygienists need to be involved in promoting careers in dental hygiene.

In direct contact with the public and representing the profession, practicing dental hygienists are ideal marketing agents for career promotion. Promotion, one of the elements of marketing, is a simple and effective means by which dental hygienists can advertise dental hygiene as a desirable career. The purpose of this investigation was to determine whether dental hygienists promote their profession as a desirable career. Minimal research was found addressing the issue of

dental hygienists' promotional attitudes and behaviors. Therefore the results of this investigation provides the profession with useful market research information, advantageous in developing professional advancements and career recruitment strategies.

A pilot study (n=10) was used to reveal necessary revisions in methods and to establish validity and reliability of the data collection instrument. Upon completion of the pilot study, the Dental Hygienists' Participation in Career Recruitment questionnaire was subsequently sent to a random sample (n=600) of dental hygienists licensed and residing within the Commonwealth of Virginia. Data were obtained from 367 usable questionnaires (61.2 percent) and analyzed by means of frequencies, and percentages and cross tabulations of key variables.

This investigation found that respondents promote and encourage dental hygiene as a desirable career. Dental hygienists placed the responsibility for career promotion on the professional association (ADHA), educators, and practicing dental hygienists. Also, respondents were not threatened by the likelihood that encouraging dental hygiene careers would reduce the number of attractive career opportunities. Dental hygienists in this study were optimistic regarding dental hygiene and its existence as a distinct profession by the year 2000.

Regardless of demographic backgrounds, results showed that respondents held a positive image of themselves, and their profession. Analysis found this positive self-image as reflected by image-related statements correlated to respondents' promotional attitudes and behaviors, thus, were considered influential factors.

The sample population was found satisfied with their career choice in dental hygiene and their current job situation. All satisfaction statements except "satisfaction with current benefits" correlated to dental hygienists' promotional behaviors. Therefore, career and job satisfaction were the primary influential factors contributing to dental hygienists' promotional behaviors.

This investigation found that the majority of respondents were discouraged by the lack of opportunities for advancement found in clinical practice. These particular respondents held higher educational degrees, graduated from dental hygiene school before 1980 and were in clinical practice for longer than 6 years.

Earning potential was found to be significant factor influencing respondents' promotional behaviors. Significant career appeal for dental hygiene has been immediate earning potential as opposed to benefits received, which might explain this attitude.

The departure of dental hygienists from clinical practice correlated to respondents' promotional behaviors. The issue

of practitioner attrition from dental hygiene on dental hygienists promotional attitudes were found objective in nature i.e., "colleagues" known who left clinical practice and respondents who considered leaving clinical practice. The profile of these respondents were similar to dental hygienists discouraged by the lack of advancements found in clinical practice. These results verify that satisfaction was an essential factor in dental hygienists' promotional behaviors.

Results found conflicting responses with two related statements. These results suggested that the sample population may have been influenced by the rumors of a dental hygiene manpower shortage. Respondents believed there were not enough dental hygienists in the market, however, believed that no surplus of dental hygiene jobs existed in their communities. A surplus of jobs would have indicated a demand for dental hygienists confirming the respondent's belief that there were not enough dental hygienists in the market. The inconsistency in responses may suggest respondents may have been influenced by the rumors to a dental hygiene manpower shortage or that some dental hygienists (nonmembers) might have limited access to accurate information about dental hygiene manpower via the ADHA.

The influence of professional affiliation did not contribute to dental hygienists' attitudes toward promotion. Only 38 percent of the sample population were members of ADHA. The perceived high membership dues was the primary factor

detering dental hygienists from seeking membership. However, comments by 10 percent of the respondents suggested another perspective about why membership to ADHA remains low. Dissatisfaction and disappointment experienced with the organization at the local level was another reason discouraging membership. Respondents' experience and perception of ADHA was only through their local component. Dental hygienists disenchanted with membership on the local level discontinued membership. Therefore, respondents could not warrant paying the dues which they would invariably perceive as high. Results showed a contradiction in respondents' attitudes towards the purpose of ADHA. Respondents believed that ADHA was an influential force in determining dental hygiene's future. However, dental hygienists believed that membership support was not an integral factor in this endeavor.

Finally, results found that only 38 percent of the respondents were consulted by patients about career opportunities in dental hygiene. These results suggest that career seeking individuals were either unfamiliar, disinterested or did not perceive dental hygiene as a desirable career possibility. These results further indicated that dental hygienists must take the initiative and electively promote dental hygiene as a desirable career. Dental hygiene students and practitioners need to be enlightened of their potential promotional capabilities.

Based on these findings, the following conclusions are made:

1. Dental hygienists are generally satisfied with dental hygiene as their career choice; they encourage and promote dental hygiene as a desirable career. This information is encouraging, as practicing dental hygienists have the ideal opportunity to educate and generate public interest about the dental hygiene profession. Dental hygienists need to be cognizant and take advantage of the potential they hold by promoting electively not only careers in dental hygiene but the profession of dental hygiene in general. Dental hygiene educators need to enlighten and educate dental hygiene students of the mechanics and the importance of "professional promotion." Continuing education courses and lectures on methods, strategies, and the importance of promoting the profession need to be organized for practicing clinicians. By enlightening dental hygienists of their individual potential, they can collectively attain the desired recognition dental hygiene needs to attain to attract potential applicants.

2. Dental hygienists hold a positive image of themselves, and their profession, and perceive dental hygiene as a career, unfortunately, the public does not hold the same perception. The practicing dental hygienist, directly involved with the public is responsible for creating perceptions. Dental hygiene educators need to emphasize the importance of creating and maintaining a professional image. Dental hygiene educa-

tors act as mentors, and role models, and carry the weight of influencing dental hygiene students. Educators who display an active, positive, professional interest in dental hygiene can only inspire students to follow similarly. Therefore, mentoring is an essential element in developing a professional attitude. Individual dental hygienists who hold a professional attitude will collectively personify the desired image to the public.

3. Although dental hygienists are generally satisfied with their career choice, the lack of advancements found in clinical practice has discouraged many practitioners from remaining in clinical practice. Under the legislative control of the dental profession, dental hygiene is bound to restrictive and limiting clinical practice mandates. Dental hygiene can gain autonomy from dentistry by dental hygienists uniting their efforts and lobbying for self-regulation. A professional organization is the underlying force that collectively unites its members and is responsible for implementing strategies for professional development and advancements. Unfortunately, membership in ADHA remains incessantly low. Although dental hygienists believe in the importance of membership support, the majority are not association members. A full scale marketing campaign needs to be implemented to educate, influence and encourage membership.

Considering the results and limitations of this study, the following recommendations for future study include:

1. Conduct a comprehensive investigation to measure attitudes and perceptions held by dental hygienists, dentists and the public on the scope of dental hygiene practice, on the dental hygienist, and their visions of dental hygiene's future. This information would assist in designing effective marketing strategies for career recruitment and retention and in achieving greater public recognition.

2. Conduct further research to determine the effects of circulating misinformation on dental hygiene manpower.

a. Has misinformation united and strengthened dental hygiene efforts to control against the acceptance of preceptor-trained dental hygienists?

b. Has misinformation been advantageous in attaining increased salaries, benefits and "respect" for dental hygienists?

3. Conduct research to determine dental hygienists' perceptions, attitudes and expectations of ADHA.

a. Are dental hygienists satisfied with the achievements and progress ADHA has made towards advancing the profession?

b. What are dental hygienists' recommendations for improving "ADHA" and increasing ADHA membership?

c. What are dental hygienists' future expectations and perceptions of their profession and how (or if) does ADHA and membership fit into this vision.

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APPENDICES

APPENDIX A

SAMPLE OF COVER LETTER FOR PILOT STUDY

OLD DOMINION UNIVERSITY

College of Health Sciences
Norfolk, Virginia 23529-0499

August 16, 1990

Dear Dental Hygienist;

You have been selected to participate in a pilot study to determine the extent dental hygienists are promoting dental hygiene as a professional career.

Dental hygiene is currently experiencing a shortage of applicants to its professional programs. The departure of dental hygiene practitioners from clinical practice has affected the shortage as well. Recruitment has become a vital focal point in replenishing the diminishing supply of dental hygienists. The attached questionnaire provides understanding on the extent dental hygienists promote dental hygiene as a career.

I would really appreciate and welcome your help with the wording of the questionnaire. I am interested if you feel any of the questions are not clear, offensive or vague. As the continuation of this research is contingent on the completion of this questionnaire, please return this survey as soon as possible in the pre-addressed stamped envelope. As a practitioner of 13 years, I sincerely appreciate your time and effort. Should you be interested, I will be most happy to send you the results of this research.

Sincerely,

Taline Dadian, RDH
Graduate Student

APPENDIX B

SAMPLE OF THE COVER LETTER

OLD DOMINION UNIVERSITY

College of Health Sciences
Norfolk, Virginia 23529-0499

September 14, 1990

Dear Dental Hygienist,

You have been randomly selected to participate in a survey. **This is OUR chance to make a difference.** As a dental hygiene practitioner for the past 13 years, I would like to know your personal opinion about promoting dental hygiene as a career. The results of this study will assist the profession in developing useful strategies to promote the profession to potential applicants.

In order for the survey to produce meaningful data, please answer **ALL** the questions thoroughly and accurately. Answer the questionnaire in a relaxed atmosphere. A total of 15 minutes may be required to complete the material.

Please return the answered survey by Sept. 28th. For your convenience, an addressed, stamped envelope is enclosed in which to return the survey.

For purposes of checking which surveys have been returned, the envelopes and questionnaires have been numbered. Numbers will not be identified with individual questionnaires. Therefore, your response will be kept anonymous and confidential.

The results of the study will be reported in a group form and results will be available through the School of Dental Hygiene and Dental Assisting, Old Dominion University. I greatly appreciate your participation. Thank you for your **HELP!**

Sincerely,

Taline Dadian, RDH
Graduate Student
Old Dominion University

APPENDIX C
SAMPLE OF REMINDER LETTER

OLD DOMINION UNIVERSITY

College of Health Sciences
Norfolk, Virginia 23529-0499

October 5, 1990

Dean

Dear Dental Hygienist:

and

The School of Dental Hygiene has not yet received your questionnaire packet on Dental Hygiene Practitioners' Participation in Career Recruitment that was mailed to you on September 14, 1990. As we need these responses by October 19, 1990, in order to complete the survey, your cooperation is very much appreciated.

ital

For your convenience, another pre-addressed stamped envelope is enclosed to return the questionnaire as soon as possible. If you have already returned the questionnaire, thank you for your time and participation in this study.

Sincerely,

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Talley Hadian, RDH
Graduate Student
Old Dominion University

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APPENDIX D
QUESTIONNAIRE

DENTAL HYGIENISTS' PARTICIPATION IN CAREER RECRUITMENT

PART I

DIRECTIONS: THE FOLLOWING STATEMENTS DEAL WITH ATTITUDES ABOUT THE DENTAL HYGIENE PROFESSION AND PROMOTING DENTAL HYGIENE AS A CAREER. PLEASE INDICATE YOUR OPINION BY CIRCLING THE APPROPRIATE LETTER(S).

PLEASE ANSWER ALL ITEMS

SA = STRONGLY AGREE

A = AGREE

U = UNDECIDED

D = DISAGREE

SD = STRONGLY DISAGREE.

- | | | | | | | |
|-----|---|----|---|---|---|----|
| 1. | I am satisfied with my career choice in dental hygiene. | SA | A | U | D | SD |
| 2. | My patients regard me as a professional rather than an auxiliary member of the dental team. | SA | A | U | D | SD |
| 3. | A majority of people believe that dental hygienists earn high salaries. | SA | A | U | D | SD |
| 4. | There is status and prestige associated with being a dental hygienist. | SA | A | U | D | SD |
| 5. | The practice of dental hygiene is considered secondary to dentistry. | SA | A | U | D | SD |
| 6. | I am dissatisfied with my career choice in dental hygiene. | SA | A | U | D | SD |
| 7. | I feel it is my professional responsibility to belong to the ADHA. | SA | A | U | D | SD |
| 8. | There are not enough dental hygienists in the market. | SA | A | U | D | SD |
| 9. | The majority of my patients perceive my role as a dental hygienist to be that of a "tooth cleaner". | SA | A | U | D | SD |
| 10. | Patients often ask my opinion about pursuing a career in dental hygiene. | SA | A | U | D | SD |

11.	I tell prospective candidates that dental hygiene is a desirable career.	SA	A	U	D	SD
12.	I am satisfied with the variety of preventive services I provide to my patients.	SA	A	U	D	SD
13.	I find clinical practice discouraging because of the lack of opportunities for advancement.	SA	A	U	D	SD
14.	I tell my patients that I am proud to be a dental hygienist.	SA	A	U	D	SD
15.	I take the responsibility to encourage interested candidates to pursue a career in dental hygiene.	SA	A	U	D	SD
16.	Dental hygiene is more than a job; it is my career.	SA	A	U	D	SD
17.	I am satisfied with my earning potential as a clinical dental hygienist.	SA	A	U	D	SD
18.	When asked, I discourage potential candidates from a career in dental hygiene.	SA	A	U	D	SD
19.	It is ADHA's responsibility to promote a career in dental hygiene.	SA	A	U	D	SD
20.	I believe professional advancement is or can be achieved by joining ADHA.	SA	A	U	D	SD
21.	Dental hygiene educators are in the best position to promote careers in dental hygiene.	SA	A	U	D	SD
22.	I am familiar with the membership benefit package offered by ADHA	SA	A	U	D	SD
23.	The membership benefit package offered by ADHA does not suit my needs.	SA	A	U	D	SD
24.	There is a surplus of dental hygiene jobs in my community.	SA	A	U	D	SD

- | | | | | | | |
|-----|---|----|---|---|---|----|
| 25. | Encouraging others to enter dental hygiene programs will only decrease salaries and chances for securing "better jobs". | SA | A | U | D | SD |
| 26. | Many dental hygienists are departing clinical practice. | SA | A | U | D | SD |
| 27. | I am satisfied with the benefits I receive in my current practice. | SA | A | U | D | SD |
| 28. | My patients trust me. | SA | A | U | D | SD |
| 29. | I remain current on health related issues and technology. | SA | A | U | D | SD |
| 30. | ADHA can function adequately without the support of membership. | SA | A | U | D | SD |
| 31. | Many of my dental hygiene colleagues have departed from clinical practice. | SA | A | U | D | SD |
| 32. | ADHA is an influential force in determining the future of dental hygiene. | SA | A | U | D | SD |
| 33. | I have thought about leaving clinical practice. | SA | A | U | D | SD |
| 34. | I am concerned that the current supply of dental hygiene clinicians will not adequately serve the public. | SA | A | U | D | SD |
| 35. | I believe that dental hygiene will continue to exist as a distinct profession in the year 2000. | SA | A | U | D | SD |

PLEASE CONTINUE TO PART II

PART II

DIRECTIONS: PLEASE ANSWER THE FOLLOWING QUESTIONS BY CHECKING THE SINGLE BEST ANSWER OR FILLING IN THE APPROPRIATE RESPONSE.

36. AGE:

20 - 25 _____
 26 - 30 _____
 31 - 35 _____
 36 - 40 _____
 41 - 45 _____
 46 - 50 _____
 51 - 60 _____
 61 - 65 _____

37. YEAR GRADUATED FROM DENTAL HYGIENE SCHOOL:

BEFORE 1965 _____
 1966 - 1970 _____
 1971 - 1975 _____
 1976 - 1980 _____
 1981 - 1985 _____
 1986 - 1990 _____

38. HIGHEST DEGREE EARNED:

ASSOCIATE/
 CERTIFICATE _____
 BACHELOR _____
 MASTERS _____
 DOCTORATE _____
 OTHER _____

39. YEARS OF DENTAL HYGIENE PRACTICE:

5 - LESS _____
 6 - 10 _____
 11 - 15 _____
 16 - 20 _____
 21 - MORE _____

(PLEASE SPECIFY)

40. ARE YOU CURRENTLY EMPLOYED AS A DENTAL HYGIENIST?:

YES _____ (IF YES CONTINUE TO QUESTION # 42)

NO _____ (IF NO CONTINUE TO QUESTION # 41)

41. REASONS FOR CURRENT UNEMPLOYMENT AS A DENTAL HYGIENIST:
 (select one answer, then go on to #46)

_____ FAMILY RESPONSIBILITIES
 _____ HEALTH
 _____ PREFER NON-HYGIENE EMPLOYMENT
 _____ SUITABLE HYGIENE JOB NOT AVAILABLE
 _____ RETURN TO SCHOOL
 _____ OTHER (PLEASE SPECIFY)

42. CURRENT EMPLOYMENT SETTING:

PRIVATE DENTAL OFFICE _____

EDUCATIONAL SETTING
HOSPITAL _____

PUBLIC HEALTH _____

INDUSTRY _____

OTHER (PLEASE
SPECIFY) _____43. CURRENT NO. OF HOURS
EMPLOYED PER WEEK:

LESS THAN 20 _____

20 - 30 _____

31 - 40 _____

MORE THAN 40 _____

44. YEARLY SALARY:

LESS THAN \$14,999 _____

\$15,000 - \$19,999 _____

\$20,000 - \$24,999 _____

\$25,000 - \$29,999 _____

\$30,000 - \$34,999 _____

\$35,000 - \$39,999 _____

\$40,000 - \$44,999 _____

\$45,000 - \$49,999 _____

MORE THAN \$50,000 _____

45. Concerning your
present employment
situation are you:

SATISFIED _____

DISSATISFIED _____

46. ARE YOU A MEMBER OF ADHA:

_____ YES (PLEASE CONTINUE TO QUESTION # 47)

_____ NO (PLEASE CONTINUE TO QUESTION # 48)

47. REASONS FOR MEMBERSHIP: (CHOOSE THREE REASONS, RANK #1 AS
MOST IMPORTANT, #2 AS SECOND IMPORTANT, AND #3 AS THIRD
IMPORTANT)

PARTICIPATE IN LEGISLATIVE ISSUES _____

SUPPORT MY PROFESSION _____

TAKE ADVANTAGE OF CONTINUING
EDUCATION COURSES _____

RECEIVE THE JOURNAL _____

INSURANCE BENEFITS _____

OTHER, (PLEASE SPECIFY) _____

APPENDIX E

-----SES TO PART 1 OF QUESTIONNAIRE

PART 1 - Attitudinal Statements

1. I am satisfied with my career choice in dental hygiene.

N= 367	<u>frequency</u>	<u>percent</u>
Strongly disagree	10	2.7
Disagree	27	7.4
Undecided	29	7.9
Agree	183	49.9
Strongly agree	118	32.2

- 2. My patients regard me as a professional rather than an auxiliary member of the dental team.

N=362	<u>frequency</u>	<u>percent</u>
No Response	5	
Strongly disagree	13	2.2
Disagree	39	10.8
Undecided	63	17.4
Agree	183	50.6
Strongly Agree	69	19.1

3. A majority of people believe that dental hygienists earn high salaries.

N=363	<u>frequency</u>	<u>percent</u>
No Response	4	
Strongly Disagree	6	1.7
Disagree	72	19.8
Undecided	87	22.9
Agree	167	46.0
Strongly Agree	35	9.6

4. There is status and prestige associated with being a dental hygienist.

N=367	<u>frequency</u>	<u>percent</u>
Strongly Disagree	8	2.2
Disagree	80	21.8
Undecided	79	21.5
Agree	166	45.2
Strongly Agree	34	9.3

5. The practice of dental hygiene is considered secondary to dentistry.

N=364	<u>frequency percent</u>	
No Response	3	
Strongly Disagree	11	3.0
Disagree	59	16.2
Undecided	38	9.6
Agree	182	50.0
Strongly Agree	77	21.2

6. I am dissatisfied with my career choice in dental hygiene.

N=365	<u>frequency percent</u>	
No Response	2	
Strongly Disagree	119	32.6
Disagree	170	46.6
Undecided	31	7.9
Agree	33	9.0
Strongly Agree	14	3.8

- 7. I feel it is my professional responsibility to belong to the ADHA.

N=365	<u>frequency percent</u>	
No Response	2	
Strongly Disagree	11	3.0
Disagree	89	24.0
Undecided	102	27.4
Agree	97	26.6
Strongly Agree	68	18.6

8. There are not enough dental hygienists in the market.

N=367	<u>frequency percent</u>	
Strongly Disagree	18	4.9
Disagree	85	23.2
Undecided	84	22.9
Agree	142	38.7
Strongly Agree	38	10.4

9. The majority of my patients perceive my role as a dental hygienist to be that of a "tooth cleaner".

N=364

	<u>frequency</u>	<u>percent</u>
No Response	3	
Strongly Disagree	8	2.2
Disagree	106	29.1
Undecided	33	8.5
Agree	172	47.3
Strongly Agree	47	12.9

10. Patients often ask my opinion about pursuing a career in dental hygiene.

N=361

	<u>frequency</u>	<u>percent</u>
No Response	6	
Strongly Disagree	27	7.5
Disagree	163	45.2
Undecided	32	8.9
Agree	135	37.4
Strongly Agree	4	1.1

11. I tell prospective candidates that dental hygiene is a desirable career.

N=367

	<u>frequency</u>	<u>percent</u>
Strongly Disagree	6	1.6
Disagree	33	9.0
Undecided	37	10.1
Agree	222	60.5
Strongly Agree	69	18.8

12. I am satisfied with the variety of preventive services I provide to my patients.

N=364

	<u>frequency</u>	<u>percent</u>
No Response	3	
Strongly Disagree	9	2.5
Disagree	50	13.7
Undecided	33	9.1
Agree	224	61.5
Strongly Agree	48	13.2

13. I find clinical practice discouraging because of the lack of opportunities for advancement.

N=365	<u>frequency</u> <u>percent</u>	
No Response	2	
Strongly Disagree	17	4.7
Disagree	128	35.1
Undecided	50	13.7
Agree	100	27.4
Strongly Agree	70	19.2

14. I tell my patients that I am proud to be a dental hygienist.

N=364	<u>frequency</u> <u>percent</u>	
No Response	3	
Strongly Disagree	3	0.8
Disagree	32	8.8
Undecided	29	8.0
Agree	205	56.3
Strongly Agree	95	26.1

15. I take the responsibility to encourage interested candidates to pursue a career in dental hygiene.

N=367	<u>frequency</u> <u>percent</u>	
Strongly Disagree	10	2.7
Disagree	28	7.6
Undecided	57	15.5
Agree	191	52.0
Strongly Agree	81	22.1

16. Dental hygiene is more than a job; it is my career.

N=364	<u>frequency</u> <u>percent</u>	
No Response	3	
Strongly Disagree	10	2.7
Disagree	42	11.5
Undecided	37	10.2
Agree	163	44.8
Strongly Agree	112	30.8

17. I am satisfied with my earning potential as a clinical dental hygienist.

N=364	<u>frequency</u>	<u>percent</u>
No Response	3	
Strongly Disagree	28	7.7
Disagree	95	26.1
Undecided	55	15.1
Agree	150	41.2
Strongly Agree	36	9.9

18. When asked, I discourage potential candidates from a career in dental hygiene.

N=367	<u>frequency</u>	<u>percent</u>
Strongly Disagree	101	27.5
Disagree	209	56.9
Undecided	29	7.9
Agree	21	5.7
Strongly Agree	7	1.9

- 19. It is ADHA's responsibility to promote a career in dental hygiene

N=366	<u>frequency</u>	<u>percent</u>
No Response	1	
Strongly Disagree	10	2.7
Disagree	77	21.0
Undecided	101	27.6
Agree	144	39.3
Strongly Agree	34	9.3

20. I believe professional advancement is or can be achieved by joining ADHA.

N=367	<u>frequency</u>	<u>percent</u>
Strongly Disagree	14	3.8
Disagree	125	34.1
Undecided	124	33.8
Agree	84	22.9
Strongly Agree	20	5.4

21. Dental hygiene educators are in the best position to promote careers in dental hygiene.

N=365

	<u>frequency</u>	<u>percent</u>
No Response	2	
Strongly Disagree	3	0.8
Disagree	91	24.9
Undecided	97	26.6
Agree	154	42.2
Strongly Agree	20	5.5

22. I am familiar with the membership benefit package offered by ADHA.

N=366

	<u>frequency</u>	<u>percent</u>
No Response	1	
Strongly Disagree	9	2.5
Disagree	80	21.9
Undecided	56	15.3
Agree	187	51.1
Strongly Agree	34	9.3

23. The membership benefit package offered by ADHA does not suit my needs.

N=364

	<u>frequency</u>	<u>percent</u>
No Response	3	
Strongly Disagree	10	2.7
Disagree	77	21.2
Undecided	169	46.4
Agree	98	26.9
Strongly Agree	10	2.7

24. There is a surplus of dental hygiene jobs in my community.

N=367

	<u>frequency</u>	<u>percent</u>
Strongly Disagree	54	14.7
Disagree	151	41.1
Undecided	50	13.6
Agree	94	25.6
Strongly Agree	18	4.9

25. Encouraging others to enter dental hygiene programs will only decrease salaries and chances for securing "better jobs".

N=367

	<u>frequency</u>	<u>percent</u>
Strongly Disagree	74	20.2
Disagree	197	53.7
Undecided	66	18.0
Agree	24	6.5
Strongly Agree	6	1.6

26. Many dental hygienists are departing clinical practice.

N=366

	<u>frequency</u>	<u>percent</u>
No Response	1	
Strongly Disagree	2	0.5
Disagree	45	12.3
Undecided	113	30.9
Agree	179	48.9
Strongly Agree	27	7.4

27. I am satisfied with the benefits I receive in my current practice.

N=361

	<u>frequency</u>	<u>percent</u>
No Response	6	
Strongly Disagree	52	14.4
Disagree	128	35.5
Undecided	32	8.9
Agree	121	33.5
Strongly Agree	28	7.8

28. My patients trust me.

N=364

	<u>frequency</u>	<u>percent</u>
No Response	3	
Strongly Disagree	0	0.0
Disagree	3	0.8
Undecided	5	1.4
Agree	213	58.5
Strongly Agree	143	39.3

29. I remain current on health related issues and technology.

N=365	<u>frequency</u> <u>percent</u>	
No Response	2	
Strongly Disagree	1	0.3
Disagree	9	2.5
Undecided	19	5.2
Agree	237	64.9
Strongly Agree	99	27.1

30. ADHA can function adequately without the support of membership.

N=366	<u>frequency</u> <u>percent</u>	
No Response	1	
Strongly Disagree	106	29.0
Disagree	189	51.6
Undecided	66	18.0
Agree	2	0.5
Strongly Agree	3	0.8

31. Many of my dental hygiene colleagues have departed from clinical practice.

N=367	<u>frequency</u> <u>percent</u>	
Strongly Disagree	14	3.8
Disagree	142	38.7
Undecided	55	15.0
Agree	134	36.5
Strongly Agree	22	6.0

32. ADHA is an influential force in determining the future of dental hygiene.

N=364	<u>frequency</u> <u>percent</u>	
No Response	3	
Strongly Disagree	2	0.5
Disagree	11	3.0
Undecided	68	18.7
Agree	190	52.2
Strongly Agree	93	25.5

33. I have thought about leaving clinical practice.

N=365	<u>frequency percent</u>	
No Response	2	
Strongly Disagree	57	15.6
Disagree	100	27.4
Undecided	34	9.3
Agree	127	34.8
Strongly Agree	47	12.9

34. I am concerned that the current supply of dental hygiene clinicians will not adequately serve the public.

N=367	<u>frequency percent</u>	
Strongly Disagree	14	3.8
Disagree	87	23.7
Undecided	112	30.5
Agree	124	33.8
Strongly Agree	30	8.2

35. I believe that dental hygiene will continue to exist as a distinct profession in the year 2000.

N=367	<u>frequency percent</u>	
Strongly Disagree	8	2.2
Disagree	24	6.5
Undecided	78	21.3
Agree	183	49.9
Strongly Agree	74	20.2

ADDITIONAL COMMENTS

1. ...I joined ADHA, hoping to make a difference because I really believe in dental hygiene...."they" weren't interested in what I had to say because I was not in "their" circle...I truly believe in what I can do to heal and teach....not in "tea parties".
2.I found after four years of membership, there was a lot of time spent on mechanics and bickering over issues and very little substance...I even attended the state meeting and was active...There was a lot of "soapboxes", with no one knowing how to work together to solve any issue. I left...discouraged.
3. Meetings are not at a convenient time. (15 responses)
4. "Benefits do not justify the cost".
5. "What can membership do for me?"
6. ...I feel ADHA does not represent the views of the majority of dental hygienist i.e., "independent practice"...and "they" are always at odds with Dental Association which is completely nonproductive.
7. OUTRAGEOUS DUES! Most dental hygienist cannot afford them. In my component, we have only 20 members; there are approximately 125 dental hygienists in the area....The benefit package is mostly unnecessary...too much \$ spent on credit card propaganda.
8. "Unnecessary expense."
9. ...ADHA does not provide current briefings on legal issues about to be voted on or provides proper legislative assistance to protect our future.
10. ...I want to join...we don't have a local chapter...no one is interested in joining.
11. Only work 10 hours a week...cannot justify the cost of membership..
12. ...do not enjoy the meetings....nothing ever gets done.

13. ...too cliquish...
14. ADHA continues to increase dues...for what?
15. ...feel there is too much conflict between dental hygiene and dental profession.
16.I feel bad I cannot support ADHA, I am sorry that I miss out on meetings and legislative news that will affect me in years to come. I know many others who want to be involved but can't afford dues either....
17. ...I was active for years...I supported the goals and ideas of the association...now I feel the dues has not been used to meet those goals...Too much emphasis on social events and arguing with the dental association and not enough on promoting dental hygiene.
18.ADHA is too much like a political club....
19. ...no sure if membership can directly benefit me or my profession.
20. ...as a former member...I didn't feel the benefits of membership...I felt I was paying for only the journal.
21.if membership was lower, I think people would join and this would generate more money for the association.
21. ...would love to join...I will when I can afford it.
22. ...local chapter is unorganized and almost inoperative.