ROLE OF THE STUDENT PROFESSIONAL ASSOCIATION IN MENTORING DENTAL HYGIENE STUDENTS FOR THE FUTURE

Danielle Rulli Furgeson, RDH, MS

A thesis submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Science in Dental Hygiene Education in the Department of Dental Ecology, School of Dentistry.

Chapel Hill 2007

Approved by:
Rebecca S. Wilder, RDH, MS
Mary George, RDH, M.Ed
Samuel Nesbit, DDS, MS
Charlotte Peterson, RDH, MS
Diane Peterson, RDH, M.Ed Consultant, Vermont Technical College

ABSTRACT

DANIELLE FURGESON: ROLE OF THE STUDENT PROFESSIONAL ASSOCIATION IN MENTORING DENTAL HYGIENE STUDENTS FOR THE FUTURE

(Under the Direction of Rebecca S. Wilder)

The purpose of this study was to determine the perceived role of the Student American Dental Hygienists' Association (SADHA) in mentoring dental hygiene students for the future. After IRB exemption a pilot tested questionnaire was administered using *Survey Monkey*, an online survey website, to 277 individual contacts at American Dental Association (ADA) accredited dental hygiene (DH) programs. A response rate of 68% was achieved (n=186). Eighty percent indicated offering no mentoring opportunities, while 58.3% felt they actively mentor through SADHA. Respondents ranked community service/philanthropy as the main focus of SADHA. Baccalaureate degree completion programs offer more mentoring opportunities (p=<.001) while baccalaureate programs offer additional topics from guest speakers beyond dental product presentations (p=.038).

Efforts should be made to increase perception of the importance of the student professional association through the development of Best Practices for SADHA. This could benefit students by increasing mentoring opportunities and partnerships with local ADHA organizations.

ACKNOWLEDGEMENTS

I would like to thank my thesis committee, Rebecca Wilder, Mary George, Sam Nesbit, Charlotte Peterson, and Diane Peterson for their direction, commitment, and support on this research project.

I would also like to thank my husband, Jason, and my children Tanner and Katherine for supporting me in this endeavor with immeasurable patience and understanding; and my mother, Marylynn, for insisting I follow my dream. Thank you to: Dr. Steve Marron and Seo Young Park for their analysis.

Finally, I would like to thank my classmate and colleague, Carrie Bigelow, for her unwavering encouragement and friendship throughout this research project, and Jessica Kiser for sharing her guidance and experience.

TABLE OF CONTENTS

ABS	STRACT	ii
AC	KNOWLEDGEMENTS	iii
LIS	T OF TABLES	V
LIS	T OF FIGURES	vi
LIS	T OF ABBREVIATIONS	. vii
Cha	pter	
l.	INTRODUCTION	1
II.	REVIEW OF THE LITERATURE	3
III.	INTRODUCTION AND REVIEW OF THE LITERATURE	.11
IV.	METHODS AND MATERIALS	.20
V.	RESULTS	.22
VI.	DISCUSSION	.26
VII.	CONCLUSION	.31
APF	PENDIX	.43
REFERENCES6		

LIST OF TABLES

Table 1: SADHA chapter participation in National SADHA events	.33
Table 2: Attitudes and perceptions of SADHA advisors	.34
Table 3: SADHA Advisors' opinions regarding importance of SADHA	.35
Table 4: SADHA Advisors' suggestions regarding ADHA/SADHA mentoring	.36

LIST OF FIGURES

Figure 1: SADHA Advisor institutional demographics	37
Figure 2: Proportion of full-time faculty that are members of ADHA	38
Figure 3: SADHA Participation in ADHA component activities	39
Figure 4: SADHA Advisor reporting of component participation in SADHA	40
Figure 5: Mentoring opportunities offered outside DH curriculum	41
Figure 6: Primary Focus of SADHA as perceived by DH faculty advisors	42

LIST OF ABBREVIATIONS

ADA American Dental Association

ADHA American Dental Hygienists' Association

ADHP Advanced Dental Hygiene Practitioner

APTA American Physical Therapy Association

BSDH Bachelor of Science in Dental Hygiene

CE Continuing Education

DH Dental Hygiene

PT Physical Therapy

SADHA Student American Dental Hygienists' Association

U.S. United States

INTRODUCTION

Professional associations can be defined as an organization or body of practitioners representing a particular profession. Foremost, the professional association sets forth criteria that must be met for a person to be considered a member of that specific profession embodied in the mission statement of the profession. The association provides support and guidance to all members. Associations serve as a unifying point for the profession by defining its role in the public, what is acceptable conduct, the values of the profession, and present and future direction the profession wishes to take. The professional association also focuses on the individual by offering professional development of the member throughout his/her career from entry point to retirement.

Professional organizations initially take on this role by instituting formal student professional associations. Many allied health professions find themselves in the midst of radical changes and realize the importance of investing in their students while the professional organization has the students' undivided attention. Studies have been conducted to investigate the positive effect of mentoring on students' career choices. ^{1-8, 9} Professional development of students is a long term venture for the future of any profession. Instilling professional values and familiarizing the student with current professional issues

through mentoring and active participation prepares students to continue participation upon graduation.

The largest national organization advocating on behalf of the dental hygienist is the American Dental Hygienists' Association (ADHA). The ADHA's stated aim is to advance DH by setting the benchmark for dental hygiene education, licensure, practice, research, and other professional issues on behalf of dental hygienists. The Student American Dental Hygienists' Association (SADHA) was created to initiate students into the profession by offering all the experiences and benefits of an active member. The purpose of this project was to determine whether SADHA is being utilized to mentor future leaders in the DH profession.

REVIEW OF THE LITERATURE

Significance

The profession of dental hygiene is currently in a unique position to take the lead in addressing the access to oral health care crisis. ¹⁰ Concurrently, the dental hygiene profession is experiencing a shortage of dental hygienists with graduate education, an explosion in the number of associate and certificate programs and, subsequently a shortage in qualified dental hygiene educators. ^{11,12} This may be happening for many reasons ranging from lack of perceived opportunities, limitation in practice scope, and differences in income potential between academicians and those in private dental practice. These issues are vital to the progression of the profession because if there are not sufficient numbers of dental hygienists active in the professional association and filling these needed roles, the public will turn to others who are more accessible, but do not have the expertise and education requirements that dental hygienists possess. ¹³

In order to address these and other issues facing the profession, the ADHA in the paper report, "Dental Hygiene, Focus on Advancing the Profession" states, "The profession itself must embrace change, focus on growth and development, and plan for its future as well as the future oral health needs of the public." Several of the recommendations discussed in the report suggest that

the educational setting is essential in accomplishing this professional growth and development. Among the recommendations, the report specifically suggests that dental hygienists pursue graduate degrees at the master's and doctoral level. Additionally, it is recommended that dental hygienists pursue research, actively recruit for leadership within the profession, and be active in legislative issues concerning dental hygiene. Yet, the report makes no mention of the resource of the DH students, nor the Student American Dental Hygienists' Association, or the role of SADHA as a mechanism to influence the professional development of dental hygiene students in pursuing these career choices.

Professional Experiences Outside of the Curriculum

Past president of the American Dental Hygienists Association (ADHA), Mary Alice Gaston, asked key questions as to how students fit into addressing the issues of a dearth of dental hygienists in other aspects of the profession such as research and education. In a 2004 editorial, she raised several questions that are vital to our profession including: are programs simply funneling graduates into the entry level dental hygiene role; are dental hygiene faculty good role models for students; and most importantly, how do we influence talented dental hygiene students to consider leadership roles and career choices beyond clinical practice? The importance of Gaston's questions are reflected in a national membership census survey conducted by the ADHA in 2001. This census revealed that 83% of members were employed in private clinical practice, 6%

were educators, 3% were employed in corporate settings, and 1% worked in a government position.¹⁶

Students should have the chance to explore career opportunities outside of the traditional curriculum and private practice. Career opportunities such as teaching and research are often perceived as abstract concepts, making it hard for the student to picture themselves in that role. Perhaps the problem lies in student perceptions of the dental hygiene profession. Cook et al reported that understanding of students' perception of their profession is useful in developing experiences that mold students' professional identity and influence future career choices. ¹⁷ Specialty tracks are an excellent example of how extracurricular experiences can shape future career choices of dental hygiene students. In 2000, Jevack reported the critical importance of positive, highly educated role models to stimulate student interest in studies beyond undergraduate level. ¹⁸

Student Professional Associations

Student professional organizations can be used to lay the groundwork for future career choices and activism in the profession. Often, the national professional association can be an abstract concept to the student, making it difficult for the student to see how or why the organization is important to their career. Students must have a clear understanding of how the professional association affects their everyday lives by advocating on their behalf to prevent legislators and other decision makers from making decisions contrary to their best interest. ¹⁹⁻²¹ Byrd et al suggested that the use of active learning

experiences that signify the value of the professional association to the DH students are the most beneficial types of programs. ¹⁹

Other allied health professions, such as Physical Therapy (PT), are currently experiencing challenges to advancing their profession as well. The transitioning of PT entry level education to the doctoral degree can be easily compared to the development of the Advanced Dental Hygiene Practitioner (ADHP). In the quest to advance their profession, PT has recognized the importance of introducing the profession to students through the professional association. PT has experienced a, "...diminished enthusiasm and commitment among our peers for cultivating and encouraging the next generation of PTs..."

This diminished enthusiasm had become glaringly obvious to PT students, who in response, drafted a position paper. In June of 2003, the Student Assembly of the American Physical Therapy Association (APTA) sponsored a bill in the APTA House of Delegates to, "plead for mentors inside academic and clinical settings to stress the importance of professionalism, where part of being a professional is being a member of your professional organization."

This brings to light the recognition that, while involved in their student professional association, students desire more than service experiences. Service is important, however, a more effective approach would be service projects that directly address guided professional development.²⁴ Opportunities for students to explore the profession outside of the standard curriculum are crucial to their professional development and future involvement. This can easily be achieved by active mentoring in the professional organization. "Participation as a student will

help one make informed decisions about future educational career opportunities and provide insight into critical issues influencing the practice act and job market."²⁵ Students are able to recognize that the future of their respective profession depends upon being active in the professional association, but they are not likely to become active on their own.

Each dental hygiene program in the United States (US) has a professional association chapter, called the Student American Dental Hygienists' Association (SADHA). SADHA could be a structured mechanism for developing dental hygiene students for professional roles. However, the role of SADHA in each school varies widely. Therefore, the need to understand the impact the professional association is having in steering students towards advanced degrees in dental hygiene, meeting access to oral health needs and mentoring/developing future leaders in the profession is critical.

Mentoring

Mentoring is most often referred to as a professional responsibility and as a prerequisite for recruitment and job satisfaction/retention. ^{6,9, 26-29} Therefore, the subject of how mentoring is meeting the challenges just discussed should be questioned. Schrubbe defines mentors as "people who can see more in you than you see in yourself." ⁶ Rose et al describe mentors as those who "...pass on the traditions of the past to future generations with wisdom and justice without taking sides". ²⁶ Barnes discusses the role of the mentor as someone who acts as a beacon for direction. ²⁸ In general, mentoring is seen as a person or action that

has such influence as to direct another's choices and affect their perspectives.

How then, could a student organization serve a mentoring role?

Mentoring and its Effect on Career Selection

Few studies have been conducted to evaluate the role of mentoring in impacting students' career selection within a profession, yet the message is clear. The studies consistently show a correlation between mentoring and students choosing a career in dentistry/dental hygiene and dental education. ^{1, 3, 5-9, 27} Unfortunately, the vast majority of these studies are conducted in dental schools, not dental hygiene programs. In 2003 DeAngelis et al surveyed 142 prospective dental hygiene students as well as 80 enrolled students on their career choice and perceptions of dental hygiene. The results indicated that encouragement from dental hygienists and dentists provided the most influence on career choice. ³ Similarly, Cromley and Haisch surveyed 336 matriculated dental and dental hygiene students at the Oregon Health & Science University School of Dentistry and found 52% identified that mentoring by a dentist or dental hygienist as "the most influential activity" affecting their career choice.²⁷

In 2001, Shepherd et al conducted a study of dental hygiene faculty retention. This study surveyed new, full-time dental educators of all dental schools in the U.S., Puerto Rico and Canada and found: 1) mentoring is important for the retention of new faculty; and, 2) without a formal mentoring program in place, a threat to successful retention of faculty will exist. 8 Schrubbe investigated the significance and benefits of a mentoring relationship in her study

and inferred that those academic institutions that are thriving have institutionalized mentoring as an integral part of their educational process by conveying the values and tenets of the profession to the mentee. ⁶

These findings can be extrapolated to the bigger picture that mentoring within dental hygiene programs can be used to mold perceptions of opportunities within the dental hygiene profession and motivate students. All indications are that mentoring should be an integral part of any dental hygiene education program. What is not clear is how or even if, SADHA is employed to mentor dental hygiene students into professional careers and association activities/leadership beyond traditional clinical practice.

Mentoring and the Student Professional Organization

No studies have been conducted on the mentoring influence of professional associations on students, but there is information on its importance. For example, the nursing profession has long recognized the importance of mentoring as a key to their professional success.^{30, 19} Mentoring has been found to ease new graduates' transition into the profession from student and enhances their professional development.³¹

Finding alternative avenues to delivering mentoring is therefore imperative, as student mentorship has been shown to not only enhance personal and professional growth, but also to increase job satisfaction and retention. ^{1, 2, 5-9, 22, 26-28, 30, 31} Nursing is well acquainted with the particular benefit of student activism, as they have realized it prepares students "...to become politically

active professionals who participate in organizations that not only assist them professionally but which affect the health and well-being of the communities in which they live and serve." ¹⁹ Nursing programs teach students in evidence-based research, political activism, and the role of the professional association in legislative agendas because they know these things are imperative to success in promoting their profession. ^{20, 29, 32} These were the essential ingredients in procuring the status of nurse practitioners and assignment as Medicaid providers, as well as autonomy. This approach, particularly utilization of the professional association, has been so successful that it has become the gold standard for other allied health professions in achieving the same status.

INTRODUCTION AND REVIEW OF THE LITERATURE

Introduction

Professional associations can be defined as an organization or body of practitioners representing a particular profession. Foremost, the professional association sets forth criteria that must be met for a person to be considered a member of that specific profession embodied in the mission statement of the profession. The association provides support and guidance to all members. Associations serve as a unifying point for the profession by defining its role in the public, what is acceptable conduct, the values of the profession, and present and future direction the profession wishes to take. The professional association also focuses on the individual by offering professional development of the member throughout his/her career from entry point to retirement.

Professional organizations initially take on this role by instituting formal student professional associations. Many allied health professions find themselves in the midst of radical changes and realize the importance of investing in their students while the professional organization has the students' undivided attention. Studies have been conducted to investigate the positive effect of mentoring on students' career choices. ¹⁻⁹ Professional development of students is a long term venture for the future of any profession. Instilling professional values and familiarizing the student with current professional issues through

mentoring and active participation prepares students to continue participation upon graduation.

The largest national organization advocating on behalf of the dental hygienist is the American Dental Hygienists' Association (ADHA). The ADHA's stated aim is to advance DH by setting the benchmark for dental hygiene education, licensure, practice, research, and other professional issues on behalf of dental hygienists. The Student American Dental Hygienists' Association (SADHA) was created to initiate students into the profession by offering all the experiences and benefits of an active member. The purpose of this project was to determine whether SADHA is being utilized to mentor future leaders in the DH profession.

Literature Review

The profession of dental hygiene is currently in a unique position to take the lead in addressing the access to oral health care crisis. 10 Concurrently, the dental hygiene profession is experiencing a shortage of dental hygienists with graduate education, an explosion in the number of associate and certificate programs and, subsequently a shortage in qualified dental hygiene educators. 11- 12 This may be happening for many reasons ranging from lack of perceived opportunities, limitation in practice scope, and differences in income potential between academicians and those in private dental practice. These issues are vital to the progression of the profession because if there are not sufficient numbers of dental hygienists active in the professional association and filling these needed roles, the public will turn to others who are more accessible, but do

not have the expertise and education requirements that dental hygienists possess. ¹³

In order to address these and other issues facing the profession, the ADHA in the paper report, "Dental Hygiene, Focus on Advancing the Profession" states, "The profession itself must embrace change, focus on growth and development, and plan for its future as well as the future oral health needs of the public." Several of the recommendations discussed in the report suggest that the educational setting is essential in accomplishing this professional growth and development. Among the recommendations, the report specifically suggests that dental hygienists pursue graduate degrees at the master's and doctoral level. Additionally, it is recommended that dental hygienists pursue research, actively recruit for leadership within the profession, and be active in legislative issues concerning dental hygiene. ¹⁴ Yet, the report makes no mention of the resource of the DH students, nor the Student American Dental Hygienists' Association, or the role of SADHA as a mechanism to influence the professional development of dental hygiene students in pursuing these career choices.

Past president of the American Dental Hygienists Association (ADHA),
Mary Alice Gaston, asked key questions as to how students fit into addressing
the issues of a dearth of dental hygienists in other aspects of the profession such
as research and education. In a 2004 editorial, she raised several questions that
are vital to our profession including: are programs simply funneling graduates
into the entry level dental hygiene role; are dental hygiene faculty good role
models for students; and most importantly, how do we influence talented dental

hygiene students to consider leadership roles and career choices beyond clinical practice?¹⁵ The importance of Gaston's questions are reflected in a national membership census survey conducted by the ADHA in 2001. This census revealed that 83% of members were employed in private clinical practice, 6% were educators, 3% were employed in corporate settings, and 1% worked in a government position.¹⁶

Students should have the chance to explore career opportunities outside of the traditional curriculum and private practice. Career opportunities such as teaching and research are often perceived as abstract concepts, making it hard for the student to picture themselves in that role. Perhaps the problem lies in student perceptions of the dental hygiene profession. Cook et al reported that understanding of students' perception of their profession is useful in developing experiences that mold students' professional identity and influence future career choices. ¹⁷ Specialty tracks are an excellent example of how extracurricular experiences can shape future career choices of dental hygiene students. In 2000, Jevack reported the critical importance of positive, highly educated role models to stimulate student interest in studies beyond undergraduate level. ¹⁸

Student professional organizations can be used to lay the groundwork for future career choices and activism in the profession. Often, the national professional association can be an abstract concept to the student, making it difficult for the student to see how or why the organization is important to their career. Students must have a clear understanding of how the professional association affects their everyday lives by advocating on their behalf to prevent

legislators and other decision makers from making decisions contrary to their best interest. ¹⁹⁻²¹ Byrd et al suggested that the use of active learning experiences that signify the value of the professional association to the students are the most beneficial types of programs. ¹⁹

Other allied health professions, such as Physical Therapy (PT), are currently experiencing challenges to advancing their profession as well. The transitioning of PT entry level education to the doctoral degree can be easily compared to the development of the Advanced Dental Hygiene Practitioner (ADHP). In the quest to advance their profession, PT has recognized the importance of introducing the profession to students through the professional association. PT has experienced a, "...diminished enthusiasm and commitment among our peers for cultivating and encouraging the next generation of PTs..."

This diminished enthusiasm had become glaringly obvious to PT students, who in response, drafted a position paper. In June of 2003, the Student Assembly of the American Physical Therapy Association (APTA) sponsored a bill in the APTA House of Delegates to, "plead for mentors inside academic and clinical settings to stress the importance of professionalism, where part of being a professional is being a member of your professional organization."

This brings to light the recognition that, while involved in their student professional association, students desire more than service experiences. Service is important, however. A more effective approach would be service projects that directly address guided professional development. ²⁴ Opportunities for students to explore the profession outside of the standard curriculum are crucial to their

professional development and future involvement. This can easily be achieved by active mentoring in the professional organization. "Participation as a student will help one make informed decisions about future educational career opportunities and provide insight into critical issues influencing the practice act and job market." Students are able to recognize that the future of their respective profession depends upon being active in the professional association, but they are not likely to become active on their own.

Each dental hygiene program in the United States (US) has a professional association chapter, called the Student American Dental Hygienists' Association (SADHA). SADHA could be a structured mechanism for developing dental hygiene students for professional roles. However, the role of SADHA in each school varies widely. Therefore, the need to understand the impact the professional association is having in steering students towards advanced degrees in dental hygiene, meeting access to oral health needs and mentoring/developing future leaders in the profession is critical.

Mentoring is most often referred to as a professional responsibility and as a prerequisite for recruitment and job satisfaction/retention. ^{6, 9, 26-29} Therefore, the subject of how mentoring is meeting the challenges just discussed should be questioned. Schrubbe defines mentors as "people who can see more in you than you see in yourself." ⁶ Rose et al describe mentors as those who "…pass on the traditions of the past to future generations with wisdom and justice without taking sides". ²⁶ Barnes discusses the role of the mentor as someone who acts as a beacon for direction. ²⁸ In general, mentoring is seen as a person or action that

has such influence as to direct another's choices and affect their perspectives.

How then, could a student organization serve a mentoring role?

Few studies have been conducted to evaluate the role of mentoring in impacting students' career selection within a profession, yet the message is clear. The studies consistently show a correlation between mentoring and students choosing a career in dentistry/dental hygiene and dental education. ^{1, 3, 5-9, 27} Unfortunately, the vast majority of these studies are conducted in dental schools, not dental hygiene programs. In 2003 DeAngelis et al surveyed 142 prospective dental hygiene students as well as 80 enrolled students on their career choice and perceptions of dental hygiene. The results indicated that encouragement from dental hygienists and dentists provided the most influence on career choice. ³ Similarly, Cromley and Haisch surveyed 336 matriculated dental and dental hygiene students at the Oregon Health & Science University School of Dentistry and found 52% identified that mentoring by a dentist or dental hygienist as "the most influential activity" affecting their career choice. ²⁷

In 2001, Shepherd et al conducted a study of dental hygiene faculty retention. This study surveyed new, full-time dental educators of all dental schools in the U.S., Puerto Rico and Canada and found: 1) mentoring is important for the retention of new faculty; and, 2) without a formal mentoring program in place, a threat to successful retention of faculty will exist. 8 Schrubbe investigated the significance and benefits of a mentoring relationship in her study and inferred that those academic institutions that are thriving have

institutionalized mentoring as an integral part of their educational process by conveying the values and tenets of the profession to the mentee. ⁶

These findings can be extrapolated to the bigger picture that mentoring within dental hygiene programs can be used to mold perceptions of opportunities within the dental hygiene profession and motivate students. All indications are that mentoring should be an integral part of any dental hygiene education program. What is not clear is how or even if, SADHA is employed to mentor dental hygiene students into professional careers and association activities/leadership beyond traditional clinical practice.

No studies have been conducted on the mentoring influence of professional associations on students, but there is information on its importance. For example, the nursing profession has long recognized the importance of mentoring as a key to their professional success. ^{19, 30} Mentoring has been found to ease new graduates' transition into the profession from student and enhances their professional development. ³¹

Finding alternative avenues to delivering mentoring is therefore imperative, as student mentorship has been shown to not only enhance personal and professional growth, but also to increase job satisfaction and retention. ^{1-2, 5-9, 22, 26-28, 30-31} Nursing is well acquainted with the particular benefit of student activism, as they have realized it prepares students "...to become politically active professionals who participate in organizations that not only assist them professionally but which affect the health and well-being of the communities in which they live and serve." ¹⁹ Nursing programs teach students in evidence-

based research, political activism, and the role of the professional association in legislative agendas because they know these things are imperative to success in promoting their profession. ^{20, 29, 32} These were the essential ingredients in procuring the status of nurse practitioners and assignment as Medicaid providers, as well as autonomy. This approach, particularly utilization of the professional association, has been so successful that it has become the gold standard for other allied health professions in achieving the same status.

METHODS AND MATERIALS

A thirty seven question survey (Appendix) was designed with six domains:

- 1. personal demographics, 2. institutional demographics, 3. SADHA fundraising,
- 4. SADHA as a tool for mentoring leadership, 5. SADHA as a tool for mentoring future career development, and 6 attitudes and perceptions of SADHA Advisors. The attitudes and perceptions section offered some open-ended questions as well as Likert-scale questions.

Following IRB exemption of the study, the survey was pilot tested via an email sent to eight DH program Directors at various institutions across the US. The email contained a letter explaining the purpose of the study and requested that they forward the survey to their SADHA advisors. The email contained a link to an electronic survey engine, *Survey Monkey*, where participants could complete the survey and provide feedback.

Following the pilot, the survey was reviewed by a statistician within the Department of Statistics at the University of North Carolina Chapel Hill.

Adjustments to the survey questions were made based on the pilot feedback and the statistical consultation. Program directors at 277 ADA accredited DH programs were then contacted explaining the study and requesting the email address of their respective SADHA Advisor The finalized survey was posted on

Survey Monkey, an online survey engine and was emailed to 277 individual contacts at ADA accredited DH programs.

In October 2006, the survey was distributed through *Survey Monkey*. The survey contained a letter of consent and information relating the importance of the survey. Participants had to select whether they voluntarily consented to participate in the survey. If a participant chose "no", they were unable to complete the survey, instead being directed to the "thank you" page. Follow-up mailings were sent twice to non-respondents in order to ensure maximum participation in the study. A response rate of 68% (n=186) was achieved.

RESULTS

A total of 186 (n=277) SADHA advisors responded to the online survey with two reminder emails ultimately achieving a response rate of 68%. All DH programs were represented. Figure 1 exhibits the distribution of respondents' institutional setting. Eighty three percent offered an associates degree while only 13.7% offered the BSDH. 62.2% of respondents held a masters degree, 27% held a baccalaureate degree, 2.7% held a doctoral degree, 2.7% held an associate degree, and 5.4% held other degrees.

When asked about SADHA and membership in the professional association 69.4% of respondents reported that all full-time faculty members at their institution are members of ADHA while 28.4% reported only a portion of full-time faculty were ADHA members. Figure 2 presents the proportion of full time faculty members who are members of ADHA as reported by SADHA advisors. Seventy one point one percent of respondents indicated they were the SADHA advisor because they volunteered. Fifty-eight percent reported that SADHA membership was mandatory at their institution. DH students decided the SADHA agenda only 5.6% of the time, while a combination of the SADHA advisor and officers decided the agenda 81.6% of the time. Respondents indicated that 58.3% of SADHA chapters meet monthly while 5.6% meet once per semester.

When asked about SADHA as a tool for mentoring future ADHA leadership, 13.4% indicated their SADHA chapter does not participate in any local constituent or component ADHA activities, while another 12% indicated that the local ADHA constituent and components did not participate in any SADHA activities. Figure 3 presents all ADHA constituent and component activities that respondents' SADHA chapters participate in, with a majority (64.2%) participating in community activities hosted by their local ADHA. Figure 4 presents the local ADHA interaction with SADHA. Respondents indicated that hosting continuing education for SADHA was the primary way local ADHA contributed to SADHA activities. Forty-eight point three percent of respondents indicated their SADHA chapter participates in state DH practice legislation, while 41.4% report that their SADHA chapter does not participate in any DH or dental health legislation.

Participants were asked to discuss the use of SADHA as a tool to mentor DH students' future career development. Sixty-five percent have guest speakers make presentations to SADHA, with 17.4% offering career fairs or shadowing, and only 2.8% offering research days. Of the guest speakers, 69% present product information. 11.9% offer presentations on graduate dental hygiene education, 22.6% degree completion opportunities, 16.7% corporate dental hygiene opportunities, 20.8% on ADHP, and 7.7% offer presentations on research opportunities. Advisors were asked if their SADHA offered mentorship opportunities outside of the DH curriculum. Figure 5 Eighty one percent of SADHA advisors said they offered nothing outside of their curriculum. Of those who's SADHA did offer mentorship opportunities outside of the DH curriculum,

2.3% offered corporate dental hygiene opportunities, 0.6%
management/administration, 5.2% education, 9.8% public health, 1.1% research,
and 8% offered other opportunities outside of those listed.

Advisors were also asked about their SADHA chapters' participation in national SADHA events that encourage professional development and leadership experience such as those hosted at ADHA's Annual Session. Fifty-seven percent of respondents indicated that their students sometimes apply to be student delegates, while 16.3% never have students apply. Sixty-four percent of advisors indicated that their SADHA chapter never has students participate in the student table clinics or poster session at ADHA Annual Session. Table 1 presents the frequency of SADHA participation in national SADHA events. Furthermore, when queried if they were doing any professional development/mentoring activities with their SADHA chapter that could be recommended as successful strategies to other SADHA advisors, 67.8% said no, while 32.2% offered recommendations. Almost seventy percent indicated they had no suggestions as to how ADHA and SADHA could be more effective in offering professional development/mentoring to the students, while 30.3% indicated they did have some suggestions.

The attitudes and perception portion of the survey attempted to gauge SADHA advisors' needs in their role, as well as their views on the importance of SADHA, and its role in the advancement of the profession. Table 2 Figure 6 presents the primary focus of SADHA as perceived by SADHA advisors. When SADHA advisors were asked to rank order what the primary focus of the student professional association should be, the number one response was community

service/philanthropy. SADHA advisors were asked to indicate in rank order which the population ADHA should focus on developing and nurturing professional relationships with, the number one answer was dental hygienists who are not currently members of ADHA; fostering a strong relationships with SADHA was ranked second.

Bivariate analyses were performed using the Chi-Square and t-test to compare SADHA advisors' reported graduate conversion rates with geographic regions of the country. Figure 7 demonstrates SADHA chapters in the western region of the U.S. were shown to have a higher graduate conversion rate than the rest of the country (p-value=.018).

Linear regression was used to determine potential covariates influencing SADHA professional development/mentoring activities. SADHA chapters at institutions that offer a BS in Dental Hygiene (BSDH) degree completion program offer more mentoring opportunities (p-value=<.001). SADHA chapters housed in an institution offering the BSDH offer a wider variety of topics on career opportunities from guest speakers (p-value=.038).

DISCUSSION

This study confirmed that not all SADHA chapters in the US are using SADHA as a method of developing/mentoring dental hygiene students for future roles in the profession. The reasons for this are not entirely clear, but some conclusions may be drawn. Eighty one percent of SADHA advisors reported not offering any mentorship opportunities outside of the DH curriculum. This is similar to Blanchard's 2006 study which reported 74.1% of DH programs stated they offered no mentoring to assist students' transition into clinical practice or other career options. ³⁰ This is contradictory to the mentoring literature that consistently reports the impact, necessity, and importance of mentoring students. ^{1-2, 5-9, 22, 26-22, 30, 31, 33}

Seventy two percent of SADHA advisors are serving in that role because they volunteered with 30.2% reporting that they use personal time after regular work hours at home to plan for SADHA. Utilization of the student professional organization could theoretically reduce some of the pressure from time constraints off of faculty, by offering mentoring outside of the curriculum by relying on local members of the professional association. Respondents seem to reinforce this with statements such as: "I could use outside support to encourage students to be active participants."; "ADHA members should try to be more involved with the students/faculty."; "Foster development of the SADHA Advisor,

but in a manner that allows us to participate on our own time schedule."; and "Communicate to Components the need for mentoring." These suggestions would address two weaknesses stated by program directors in Blanchard's study: lack of time in the DH curriculum and inadequate support from the local dental hygiene community, and address the ADHA's charge that there must be greater networking among dental hygienists. 14, 30 These statements and the findings by Blanchard are contradictory to the 41.1% of respondents who reported their local ADHA component participates in mentoring/partnerships with their SADHA chapter. Perhaps it is a question of the type and quality of mentoring/partnerships.

The opportunities that are being offered to SADHA members are generally not activities that promote professional development or provide exposure to alternative career choices in dental hygiene. The majority of SADHA advisors reported the main option offered to SADHA members was guest speakers but 69% of these speakers discussed product information, as opposed to other topics such as opportunities in the professional association, research opportunities, or graduate dental hygiene education. This is in direct conflict with the fact that 58.3% of respondents agreed that their SADHA chapter actively mentors students' future leadership and career development. According to the Blanchard study, "...students felt mentors provided support and encouragement outside of the academic environment."

These disparities are also quite contradictory to the recommendations put forward by the ADHA's report, *Dental Hygiene: Focus on Advancing the*

Profession, and show an apparent lack of recognition of SADHA as an active, integral part of the ADHA by some faculty and the ADHA state and local bodies. This paper specifically charges dental hygiene programs to promote research, advanced education, and public health/access to care among their students. While product knowledge is certainly important to competent, high quality dental hygiene care, it does little to address the dental hygiene educator shortage, access to care crisis, or lack of dental hygienists with advanced degrees. This is furthered exampled by the reported lack of involvement in SADHA opportunities such as participating in the student table clinics and poster sessions offered at ADHA's Annual Session. Additionally, the revelations of disparities in development/mentoring opportunities through SADHA based on the degree offered are causes for concern. All DH students, regardless of the level of degree, should receive the same benefits of SADHA opportunities.

For a mentoring program to be successful both the mentor and the mentee must value such a program. In order for SADHA to be successful, faculty must also value the role of the professional association. Less than 70% of respondents reported all full time DH program faculty to be members of ADHA. One SADHA advisor suggested that to effectively reach the students, the faculty must first realize the benefits of the professional association, and therefore SADHA. It appears that all SADHA advisors may not realize the value of SADHA or the role of a student professional organization. The majority of SADHA advisors believe the focus of SADHA should be community service/philanthropy. Furthermore, the majority report that dental hygienists who are not members of

ADHA should be the focus population to promotion the future of dental hygiene, not SADHA members. Efforts should be made to help SADHA advisors understand the true value of the student professional association and how it impacts the future of the dental hygiene profession. A mentoring program for SADHA advisors and more opportunities for them to network, perhaps through an online forum, would be helpful tools.

The onus for creating professional development and mentorship opportunities should not completely fall on the SADHA advisor, however. SADHA, as part of ADHA should have more interaction with ADHA state and local entities. Forty-one point one percent of SADHA advisors reported their local ADHA members actively sought to promote mentoring partnerships with their SADHA, yet analysis revealed these interactions seem to be more available to baccalaureate level students. Table 3 displays SADHA Advisor suggestions as to how ADHA, through SADHA, could be more effective in developing/mentoring the DH student.) Blanchard's study revealed that students viewed mentorship outside of the curriculum would have a positive influence as they started their careers by providing such things as concrete, rather than abstract experiences, networking and improved ties with the local Association.³⁰ Students want to know what licensed practice will really be like, what issues they may encounter, how to handle those issues and guidance on finding the right employment for them. The state and local components are full of potential mentors regarding these and other professional issues students will be faced with as they make their first steps into licensed practice. Positive interaction with SADHA at the local and state level beyond component and CE courses, that offered concrete, reallife experiences could but more value to the Association for the student.

It is clear that for SADHA to recognize its full potential, several things must happen in the future. SADHA is not a separate entity from ADHA, but an active, integral component of it. It is incumbent upon ADHA constituent and local components to embrace these members and play an active role in their mentoring and professional development beyond continuing education. The students, the advisors and the local members all have so much to offer through their different experiences and perspectives that a bright and promising future can be realized through a partnership. ADHA has recognized the importance of its role in mentoring students. Since this study was conducted, ADHA has put its plan to reach students into action by allocating monies to establish a Manager of SADHA Relations. The primary role of this position will be to assist SADHA advisors with their programs and be a contact and face of ADHA for the students and advisors.

CONCLUSION

The changing landscape of health care and the profession of dental hygiene's role in these changes is currently being discussed at the national level. DH students are, and should be viewed as the future of the profession. Many other allied health professions have long recognized the value of the student population and have directed attention and resources to foster student professional development and mentoring. Even students, such as those enrolled in PT programs have recognized the importance of mentoring to their future careers and have demanded it; not from their educational institutions, but from their professional association. These associations in turn, have recognized the future potential of mentoring through the student associations and have set up nationwide programs. These programs also boast strong membership numbers. The APTA (American Physical Therapy Association) currently has over 66,000 members and offers "Career Starter Dues" to new graduates and the "Members Mentor Members" program. The National Student Nurses Association alone boasts over 45,000 members and offers meaningful professional mentoring opportunities through programs such as "Leadership U" which offers such things as: mentoring forums where students and nursing leaders meet online; student leadership forums; a leadership library, and a faculty forum.

What is clear is that while SADHA chapters are offering opportunities to their students, the majority appear not to be leadership and career development mentoring activities outside of the traditional curriculum.

Students need experience in what dental hygiene will be like for them outside of the educational setting. Furthermore, SADHA advisors do not agree on how SADHA should be utilized. The need to mentor the mentors is clear. The development of a Best Practices in achieving student hygienist conversion and leadership out of school could also serve to guide SADHA activities and interactions.

No other studies have been located in the literature that address SADHA and its role in mentoring DH students, student perceptions of the professional association, or the professional association's perception of their student organization. Therefore, further research should be done on student perceptions of the role of SADHA and the professional association in their future, as well as those of ADHA state and local components. Additionally, research into faculty attitudes and perceptions regarding the professional association should be done to get a panoramic perspective. With a full perspective, the profession of dental hygiene will better be served in its focus and direction.

Table 1
SADHA chapter participation in national SADHA events

Question	% Respondents				
	Α	0	S	N	
Do your students apply to be SADHA student delegates?	14%	12.9%	56.7%	16.3%	
Does your SADHA chapter participate in the table clinics hosted at ADHA Annual Sessions?	10.7%	2.8%	22%	64.4%	

A=Agree; O=Often; S=Sometimes; N=Never

Table 2
Attitudes and Perceptions of SADHA Advisors

Likert Scale Statement	% Respondents				
	SA	Α	N	D	SD
Your SADHA chapter actively					
mentors students' future	12%	58.3%	24.6%	4.6%	0.6%
leadership and career	1270	50.3%	24.0%	4.0 /	0.6%
development.					
Your SADHA promotes the	32.8%	55.2%	9.8%	2.3%	0%
ADHA professional agenda.	32.0 /6				
You actively consult ADHA or					
your constituent/component for	8.5%	28.4%	37.5%	24.4%	1.1%
guidance with SADHA.					
ADHA resources for SADHA	18.1%	51.4%	21.5%	6.8%	2.3%
are helpful.	10.176	31.476	21.576	0.0 /6	2.5 /0
Methods to promote SADHA					
Advisor interaction and	33.1%	50.9%	13.7%	2.3%	0%
networking would be helpful.					

SA=Strongly agree; A=Agree; N=Neutral; D=Disagree; SD=Strongly disagree

Table 3 SADHA Advisor opinions regarding the importance of SADHA

"Students need to understand the professional nature of their chosen career if it is to become anything other than a "job".

"Foster career development-students seem to have great ideas on what direction hygiene should take."

"The future of DH is in the hands of our students."

"It is important for the students to see firsthand what it means to be a professional and how a professional association works."

"Growing future caretakers of the profession on behalf of our patients

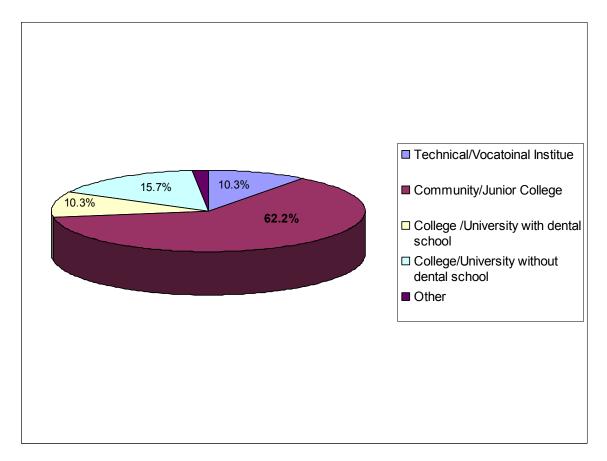
and to promote ADHA as a resource for assistance with life as a RDH."

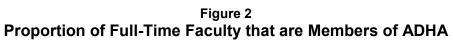
"Cohesive professional organization, strength of professional alliance."

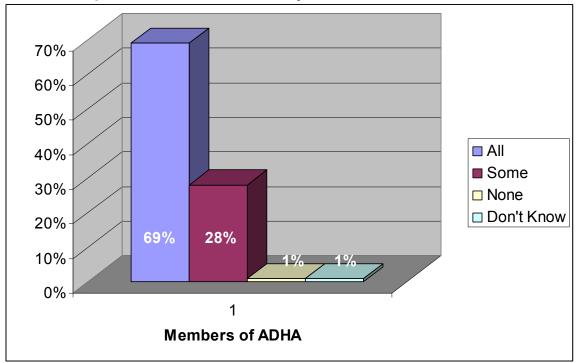
Table 4 SADHA Advisor suggestions regarding ADHA/SADHA mentoring of students

"Promote the dental hygiene profession as a team effort providing optimal care to all populations as the primary goal." "ADHA must reach the faculty to effectively reach the students. The faculty must buy into the benefits of SADHA." "Learn what their academic challenges are... Many are non-traditional and trying to manage studies, families, jobs, etc." "More tools from ADHA for individual SADHA chapters; a stronger message from ADHA regarding importance of student involvement." "More state and local dental hygiene involvement with the students...they need to come to the students, not just expect the students to come to them." "More contact with the state and national level."









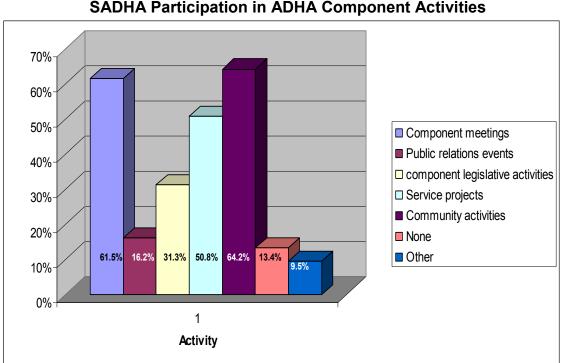
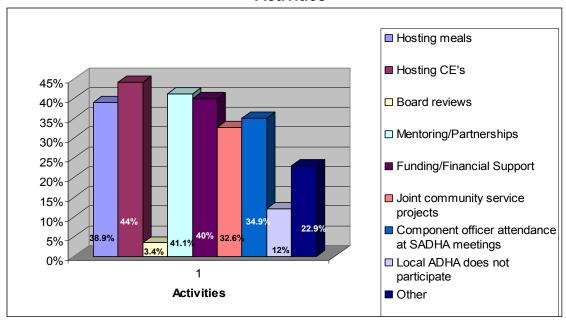
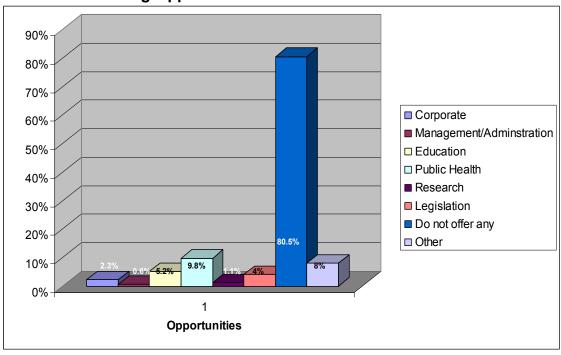


Figure 3
SADHA Participation in ADHA Component Activities

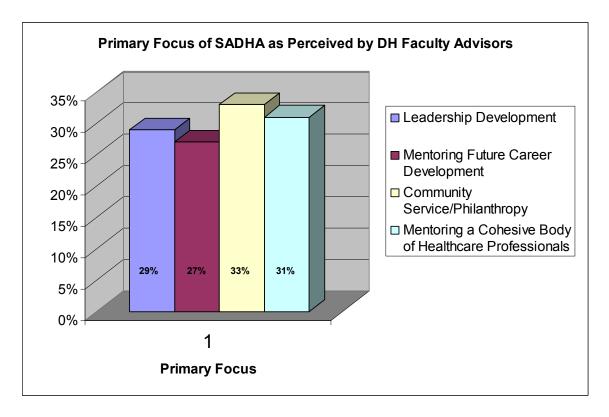
Figure 4
SADHA Advisor Reporting of ADHA Component Participation in SADHA
Activities











APPENDIX A: SURVEY INSTRUMENT

Role of SADHA in Mentoring/Developing Dental Hygiene Students for the Future

1. Personal Demographics

Edit Delete Copy/Move

My name is Danielle Furgeson, and I am a second year student in the Dental Hygiene Education Master of Science degree program at the University of North Carolina at Chapel Hill. In light of the current agenda of the profession of dental hygiene, I am conducting a survey to assess the role of SADHA in mentoring/developing dental hygiene students for the future. As a dental hygienist and educator, you know how valuable the knowledge and guidance you share with your students is to the future of our profession. The online questionnaire should take 10 minutes to complete. Deadline Date:Tuesday, November 28, 2006.

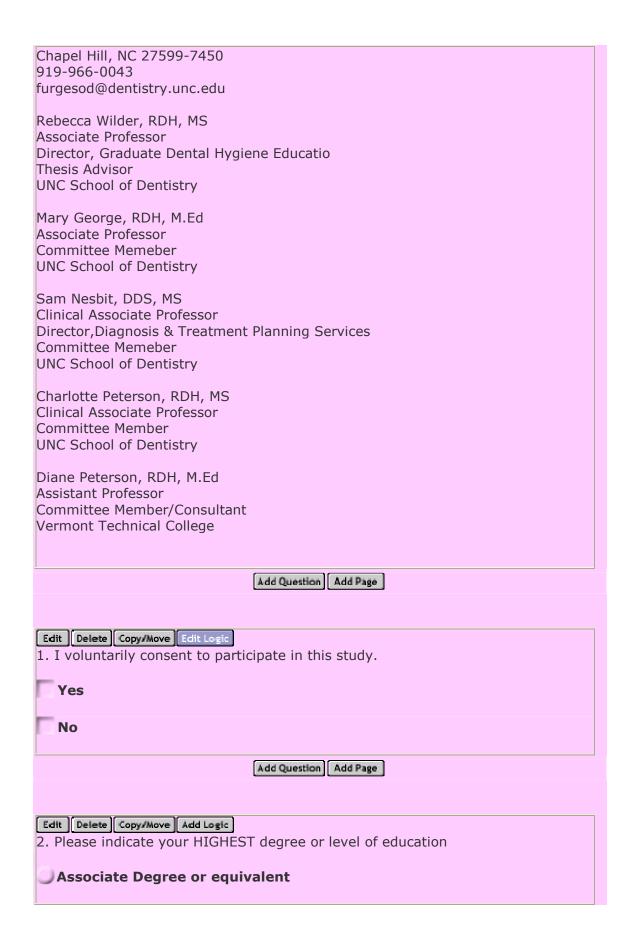
There are no financial risks, obligations or benefits to participating in this survey. Complete confidentiality/anonymity is assured as no individual can or will be identified in the study. The results will be published and shared with dental hygiene professional associations. Access to the data is limited to the principle investigator, the thesis committee and the statistical analysis personnel. To encourage as much participation as possible in this survey, non-respondents will be sent another questionnaire approximately TWO WEEKS after the original. The survey instrument will track responses for mailing purposes only, removing your email from the mailing list when your survey is submitted.

The questionnaire is composed of questions assessing demographics to describe the respondents in the study, your SADHA program and its relevance in impacting dental hygiene students' career choices, your opinions on SADHA activities and relevance, as well as proposed solutions to any perceived short falls. The results of my research will be valid only if all questions are answered truthfully and to the best of your ability.

There is potential for great professional benefit from this study. I would be happy to answer any questions you may have about the study; my contact information is listed below. Thank you in advance for your participation in this study!

Sincerely,

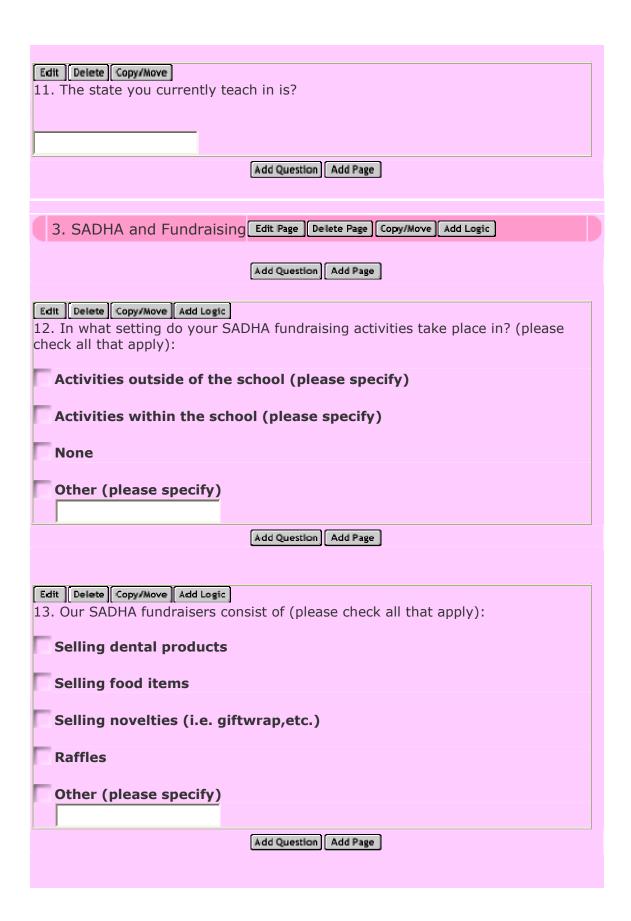
Danielle Furgeson, RDH, BA Masters Degree Candidate UNC School of Dentistry 3210 Old Dental, CB #7450

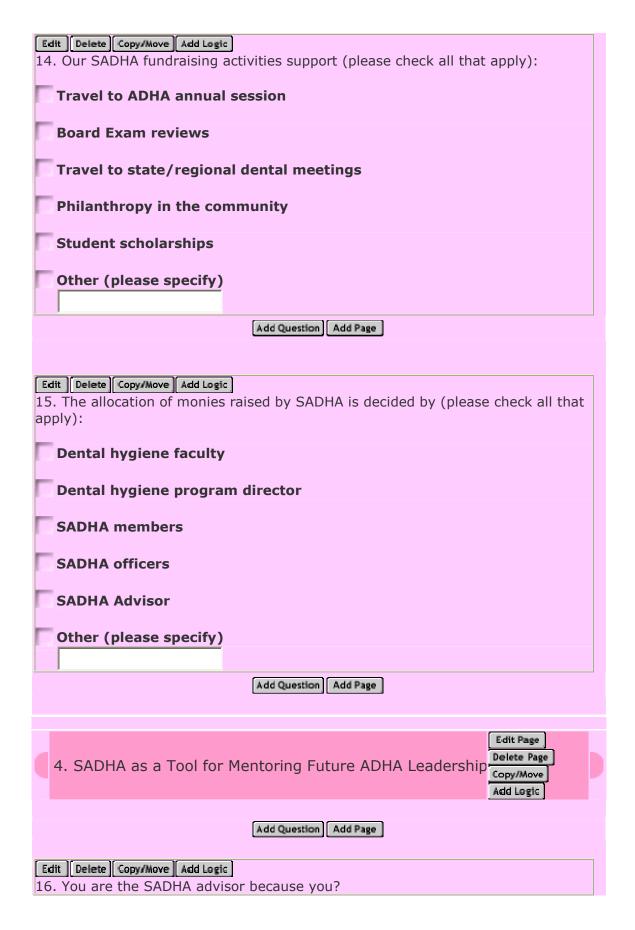


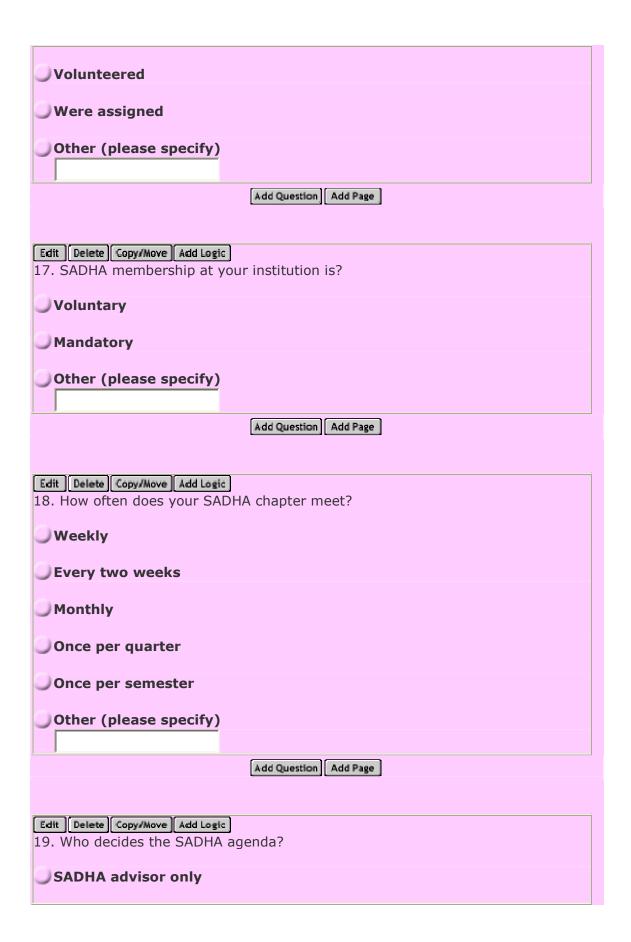
Baccalaureate
Masters
Ed.D/PhD
DDS/DMD
Other (please specify)
Other (please specify)
Add Question Add Page
Edit Delete Copy/Move
3. Please indicate how many years you have taught in dental hygiene.
Add Question Add Page
Edit Delete Copy/Move Add Logic
4. What is your current rank in your faculty position?
Professor
Associate Professor
ASSOCIATE Professor
Assistant Professor
Clinical Associate Professor
Clinical Assistant Professor
Other (please specify)
Add Question Add Page
2. Institutional Demographics Edit Page Delete Page Copy/Move Add Logic
Add Question Add Page

Edit Delete Copy/Move 5. Please Indicate the number of full-time faculty members in your dental hygiene program.
Add Question Add Page
Add Question Add Page
[Edit] [Delete] Copy/Move Add Logic] 6. How many of your current full time faculty are members of ADHA?
○ AII
Some
None
○ Don't know
Add Question Add Page
Add Question Add rage
The state of the institutional setting of your dental hygiene program.
○ Technical/Vocational Institute
Community/Junior College
College/University with dental school
College/University without dental school
Other (please specify)
Add Question Add Page
Edit Delete Copy/Move Add Logic
8. Please indicate the degrees/credentials offered by your program (please check
all that apply):
Certificate/diploma

AS/AAS
BSDH
BS
Bachelor of Science Degree Completion
Masters in Dental Hygiene
Other (please specify)
Other (please specify)
Add Question Add Page
Edit Delete Copy/Move Add Logic
9. Please indicate how dental hygiene faculty members are allocated time to work on planning for SADHA.
A set number of hours are allocated each week
Faculty discretion sets allocation of time
After hours/at home
Other (please specify)
Add Question Add Page
Edit Delete Copy/Move Add Logic 10. Dental hygiene practice options in your state are:
Direct supervision
General supervision
Independent practice
Public health supervision
Other (please specify)
Add Question Add Page

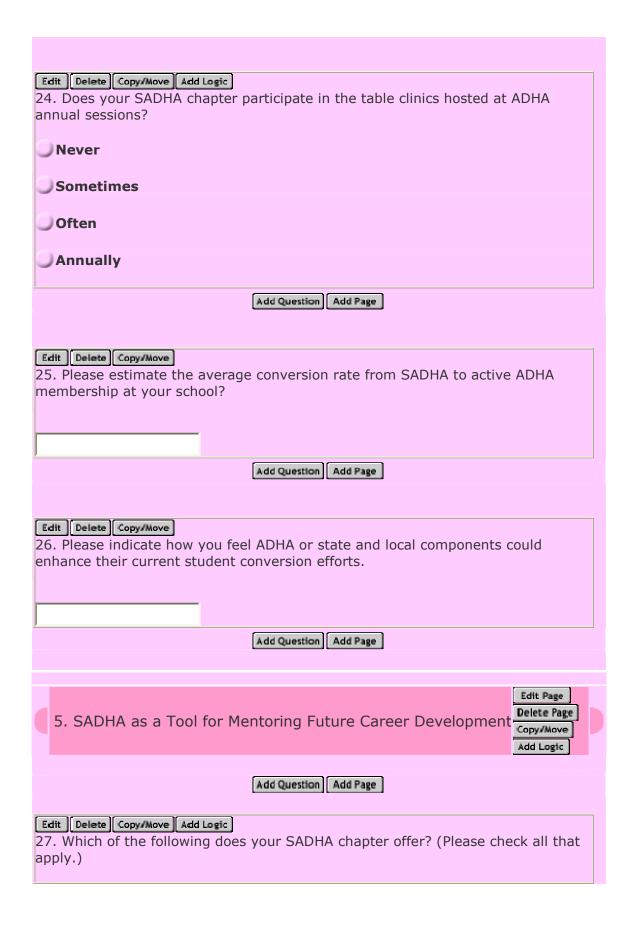




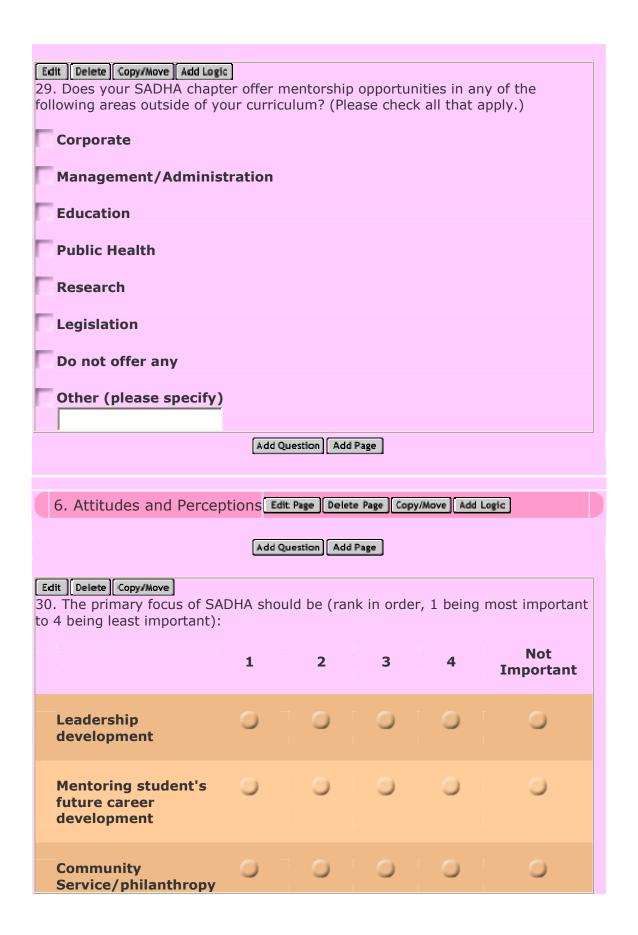


Program director only
,
Combination of SADHA officers & Advisor
SADHA officers only
Students
Other (please specify)
Add Question Add Page
Edit Delete Copy/Move Add Logic 20. Please indicate which local ADHA component activities your SADHA chapter actively participates in:
Component meetings
Public relations events
Component legislative activities
Service projects
Community activities
None
Other (please specify)
Add Question Add Page
Edit Delete Copy/Move Add Logic
21. Please indicate how your local ADHA component actively participates in SADHA activities (check all that apply):
Hosting Meals
Hosting CE's
Board Reviews
Mentoring/Partnerships

Funding/Financial support
Joint community service projects
Component officer attendance at SAHDA meetings
Local ADHA component does not participate
Other (please specify)
,
Add Question Add Page
Edit Delete Copy/Move Add Logic 22. Please indicate any dental hygiene/dental health legislative activities your
SADHA chapter participates in:
State practice legislation
Local oral health legislation
National oral health legislation
National dental hygiene legislation
Do not particpate in legislative activities
Other (please specify)
Add Question Add Page
Edit Delete Copy/Move Add Logic 23. Do your students apply to be SADHA student delegates?
Never
Sometimes
Often
Annually
Add Question Add Page



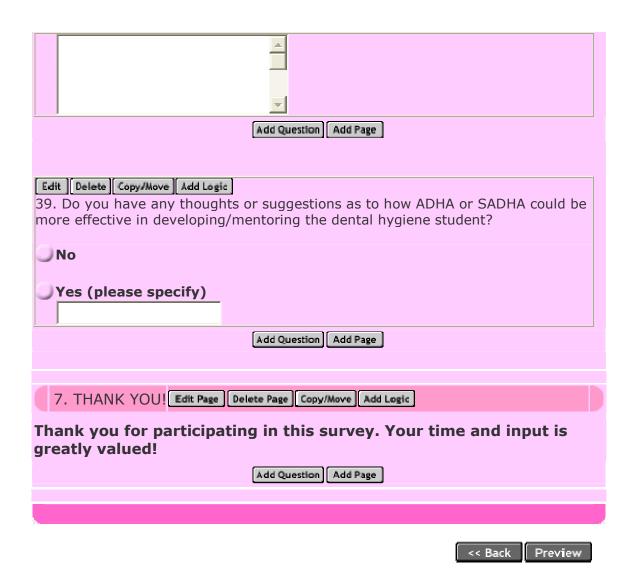
Career fairs/shadowing
Discussion panels
CE courses/lunch-and-learns
Guest speakers
Table clinics
Research days
None of the above
Other (please specify)
Add Question Add Page
Edit Delete Copy/Move Add Logic 28. If your SADHA hosts guest speakers, what specifically do they discuss? (Please check all that apply.)
Graduate dental hygiene education
Degree completion opportunities
Corporate opportunities
Advanced Dental Hygiene Practitioner
ADHA Legislative issues
Research
ADHA national & state opportunities
Product information
Do not host guest speakers
Other (please specify)
Add Question Add Page



Mentoring a cohesive body of healthcare professionals
Add Question Add Page
Edit Delete Copy/Move Add Logic 31. Your SADHA chapter actively mentors students' future leadership and career development.
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
Add Question Add Page
Edit Delete Copy/Move Add Logic
Strongly Agree
O Agree
Neutral
Disagree
Strongly Disagree
Add Question Add Page
Edit Delete Copy/Move Add Logic 33. You actively consult with ADHA or your state/local component for guidance in structuring/running your SADHA chapter.
Strongly Agree

Agree
Neutral
Disagree
Strongly Disagree
Add Question Add Page
Edit Delete Copy/Move Add Logic 34. ADHA resources for SADHA are helpful.
Strongly Agree
Agree
○ Neutral
Disagree
Strongly Disagree
Add Question Add Page
Edit Delete Copy/Move Add Logic 35. Methods to promote SADHA advisor interaction and networking would be a
helpful tool in running your SADHA chapter.
Strongly agree
Agree
Neutral
Disagree
Strongly Disagree
Add Question Add Page
Edit Delete Copy/Move

36. Promotion of the dental hygiene profession should focus on (rank in order, 1 being most important, to 4 being least important):					
	1	2	3	4	Not important
Increasing membership via recruitment of licensed non- members	0	0	0	0	
Fostering strong relationships with SADHA	0	0	0	0	0
Increased active member participation in ADHA state constituents and local components	0	0	0	0	0
	Add	Question Ad	d Page		
Edit Delete Copy/Move 37. Please indicate two primary reasons you, as both a dental hygienist and a faculty member, feel SADHA is important:					
Add Question Add Page					
Edit Delete Copy/Move Add Logic 38. Are you currently doing any professional development/ mentoring activities in your program that you would recommend as successful strategies to other SADHA advisors? No					
Yes (please specify)					



REFERENCES

- 1. Bibb CA, Lefever KH. Mentoring future dental educators through an apprentice teaching experience. J Dent Educ. 2002 Jun;66(6):703-9.
- 2. Castiglioni A, Bellini LM, Shea JA. Program directors' views of the importance and prevalence of mentoring in internal medicine residencies. J Gen Intern Med. 2004 Jul;19(7):779-82.
- 3. DeAngelis S, Dean K, Pace C. Career choice and perceptions of dental hygiene students and applicants. J Dent Hyg. 2003 Spring;77(2):97-104.
- 4. DeVore PL, Whitacre HL, Cox SS. Selection of dental hygiene as a career: Associate degree students compared with baccalaureate students. Focus Ohio Dent. 1993 Spring-Summer;67(1):2,3, 11.
- 5. Schenkein HA, Best AM. Factors considered by new faculty in their decision to choose careers in academic dentistry. J Dent Educ. 2001 Sep;65(9):832-40.
- 6. Schrubbe KF. Mentorship: A critical component for professional growth and academic success. J Dent Educ. 2004 Mar;68(3):324-8.
- 7. Wassel JR, Mauriello SM, Weintraub JA. Factors influencing the selection of dental hygiene as a profession. J Dent Hyg. 1992 Feb;66(2):81-8.
- 8. Shepherd KR, Nihill P, Botto RW, McCarthy MW. Factors influencing pursuit and satisfaction of academic dentistry careers: Perceptions of new dental educators. J Dent Educ. 2001 Sep;65(9):841-8.
- 9. Friedman PK, Arena C, Atchison K, Beemsterboer PL, Farsai P, Giusti JB, Haden NK, Martin ME, Sanders CF, Jr, Sudzina MR, Tedesco LA, Williams JN, Zinser N, Valachovic RW, Mintz JS, Sandmeyer MS, American Dental Education Association (ADEA). Report of the ADEA president's commission on mentoring. J Dent Educ. 2004 Mar;68(3):390-6.
- 10. Battrell A, Green ML. A new direction:Guest editorial. Dimensions of Dental Hygiene. 2006;4(12):10-1.
- 11. Nunn PJ, Gadbury-Amyot CC, Battrell A, Bruce SI, Hanlon LL, Kaiser C, Purifoy-Seldon B. The current status of allied dental faculty: A survey report. J Dent Educ. 2004 Mar;68(3):329-44.
- 12. Wilder RS, Mann G, Tishk M. Dental hygiene program directors' perceptions of graduate dental hygiene education and future faculty needs. J Dent Educ. 1999 Jun;63(6):479-83.

- 13. Ries E. Recruiting the next generation of PTs and PTAs. PT. What is this journal? 2005;13(11):36,37-47.
- 14. American Dental Hygienists Association. Dental Hygiene: Focus on Advancing the Profession [Internet]. Chicago: American Dental Hygienists Association; 2005.
- 15. Gaston, M. A. Outward and onward. J Dent Hyg 2004 Summer; 78(3).
- 16. Ledford JM, Wilder RS, Chichester SR, George MC. Practice trends of dental hygiene students completing specialty tracks. J Dent Hyg. 2004 Summer;78(3):4.
- 17. Cook TH, Gilmer MJ, Bess CJ. Beginning students' definitions of nursing: An inductive framework of professional identity. J Nurs Educ. 2003 Jul;42(7):311-7.
- 18. Jevack JE, Wilder RS, Mann G, Hunt RJ. Career satisfaction and job characteristics of dental hygiene master's degree graduates. J Dent Hyg. 2000 Summer;74(3):219-29.
- 19. Byrd ME, Costello J, Shelton CR, Thomas PA, Petrarca D. An active learning experience in health policy for baccalaureate nursing students. Public Health Nurs. 2004 Sep-Oct;21(5):501-6.
- 20. Rieger PT, Moore P. Professional organizations and their role in advocacy. Semin Oncol Nurs. 2002 Nov;18(4):276-89.
- 21. Haylock PJ. Health policy and legislation: Impact on cancer nursing and care. Semin Oncol Nurs. 2000 Feb;16(1):76-84.
- 22. Gibson KR. Promoting the profession to students. PT. Dec 2002;10(12):8.
- 23. Smith A. Letters. PT: Magazine of Physical Therapy. Oct 2003;11(10):8,9-10.
- 24. Olsan TH, Forbes RA, MacWilliams G, Norwood WS, Reifsteck MA, Trosin B, Weber MM. Strengthening nurses' political identity through service learning partnerships in education. J N Y State Nurses Assoc. 2003 Fall-2004 Winter;34(2):16-21.
- 25. Christensen L. Making the most of your education: The future of physical therapy. PT. 2002;10(12):50,51-53.
- 26. Rose GL, Rukstalis MR, Schuckit MA. Informal mentoring between faculty and medical students. Acad Med. 2005 Apr;80(4):344-8.
- 27. Cromley NL, Haisch MA. Mentoring: A professional responsibility. J Contemp Dent Pract. 2002 Aug 15;3(3):36-45.

- 28. Barnes WG. The mentoring experiences and career satisfaction of dental hygiene program directors. J Dent Hyg. 2004 Spring;78(2):331-9.
- 29. Klauer Triolo P, Pozehl BJ, Mahaffey TL. Development of leadership within the university and beyond: Challenges to faculty and their development. J Prof Nurs. 1997 May-Jun;13(3):149-53.
- 30. Blanchard SB, Blanchard JS. The prevalence of mentoring programs in the transition from student to practitioner among U.S. dental hygiene programs. J Dent Educ. 2006 May;70(5):531-5.
- 31. Theobald K, Mitchell M. Mentoring: Improving transition to practice. Aust J Adv Nurs. 2002 Sep-Nov;20(1):27-33.
- 32. O'Brien JM. How nurse practitioners obtained provider status: Lessons for pharmacists. Am J Health Syst Pharm. 2003 Nov 15;60(22):2301-7.
- 33. Kalet A, Krackov S, Rey M. Mentoring for a new era. Acad Med. 2002 Nov;77(11):1171-2.