

**RECRUITMENT OF DENTISTS BY MILITARY SERVICES:
IMPLICATIONS FOR ACADEMIA**

by
Ronald Hsien-Jung Hsu, DDS

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 the School of Dentistry (Pediatric Dentistry).

Chapel Hill
2006

Approved by
Advisor: Carroll-Ann Trotman, BDS, MA, MS
Reader: J. F. Camilla Tulloch, BDS, FDS, DOrth
Reader: Michael W. Roberts, DDS, MScD

© 2006
Ronald Hsien-Jung Hsu, DDS
ALL RIGHTS RESERVED

ABSTRACT

RONALD H. HSU: Recruitment of Dentists by Military Services: Implications to Academia
(Under the direction of Carroll-Ann Trotman, BDS, MA, MS)

This study seeks to explore the perceptions of senior dental students and junior military dental officers regarding their choice of a military career to identify the recruitment methodologies that influenced their decisions, and to determine if these strategies might suggest ways of increasing recruitment for dental academia. Official documentation of activities related to recruitment was requested from the military services. In-depth telephone interviews were conducted to gather qualitative data from senior dental students and junior military dental officers.

The interviews suggest that, although obtaining a dental education paid for by military scholarship was a dominant factor, other inducements to sign with the military included: guaranteed employment upon graduation; the prestige associated with the military; access to post graduate training; minimal practice management concerns; and opportunities for continue education. A career in dental education can offer similar incentives, and students may choose academia as a career if the incentives are emphasized.

To my parents, Hsu Wei-Yang and Lin Tsai-Lien,
who gave me a chance at comfort and prosperity in life
by giving up theirs,
and my dear wife Misty
who readily sacrificed her needs so that
I can pursue my dreams,
my brilliant children, Ethan and Mei-Ling,
who provided the joy and distraction much needed
during times of stress and despair,
and my fellow residents,
who made the residency program fun.

ACKNOWLEDGEMENTS

To my thesis advisor, Dr. Carroll-Ann Trotman, for giving her precious time and attention to direct this project amidst of all the other important tasks she needed to attend to.

To committee members, Dr. J. F. Camilla Tulloch and Dr. Michael W. Roberts, for their keen insight and timely advice that helped me craft this thesis.

To Dr. M. Elizabeth Bennett for lending her expertise in the social sciences that facilitated the collection of data for this project.

To Dr. William F. Vann, jr., who from the very beginning provided guidance and advice in helping me select my research topic, and his continued interest and involvement in helping me present this information to the broader audience.

To the many helpful people in the Uniformed Services as well as dental academia who gave me their time and shared with me their stories.

This research has been supported by the American Association of Orthodontists Foundation and the Maternal and Child Health Bureau Grant # 2 T17 MC 00015-14-00.

TABLE OF CONTENTS

	Page
LIST OF TABLES	viii
LIST OF FIGURES	ix
I INTRODUCTION	1
II BACKGROUND AND SIGNIFICANCE	3
Faculty Shortage in Dental Academia	3
Situation Specific to Pediatric Dentistry	3
Challenges in Recruitment	4
Military Dentistry	5
Summary	7
III GOALS AND OBJECTIVES	8
IV METHODS	9
Military Strategies and their Effectiveness: Collection of Official Documentation	9
Perceptions of Potential Recruits: In-depth Telephone Interviews	10
V RESULTS	12
Official Documentation from the Military	12
Recruitment Targets	12
Recruitment Strategies	13
Standard Military Compensations	14

	Promotional Incentives	15
	Recruitment Statistics	17
	In-depth Interviews	17
	Initial Awareness of Military Opportunities And from What Specific Source	18
	Primary Reasons for Joining the Military	19
	The Branch of the Military to which the Commitment was Made and the Reasons For Selecting that Branch	21
	Current Status with the Military	22
	Personal Regrets for Joining the Military	23
	Views on a Hypothetical Scholarship Program for Academic Dentistry, Modeled after the Health Professions Scholarship Program	24
VI	DISCUSSION	27
VII	CONCLUSION	32
	APPENDICES	38
	REFERENCES	42

LIST OF TABLES

Table	Page
1. Navy dental officer recruitment statistics from 1997 to 2005	34
2. Army dental officer recruitment statistics from 2001 to 2005	35
3. Air Force dental officer recruitment statistics for 2003 and 2004	35

LIST OF FIGURES

Figure	Page
1. Military recruitment strategies and target population pools	36
2. Incentives emphasized during military recruitment activities	36
3. Composition of study sample (n = 16)	37

INTRODUCTION

The American Dental Education Association (ADEA), formerly the American Association of Dental Schools, has been conducting annual surveys of senior dental students since the 1980's to garner information on their dental school experiences and career plans upon graduation. A published survey that included data from 1980 to 2005(1) found that on average, approximately 86% of all seniors planned to enter private practice or begin an advance education program, and ten percent intended to enter government services. Less than one percent indicated research, teaching, and administration as their immediate plan of choice. The responses of the students to questions concerning their post-graduation plans have remained remarkably similar from year to year. It is unclear why so few students considered academic dentistry a viable career option as compared to a career in the government services. This difference raises questions regarding the recruitment strategies used by the two entities.

The government services include the Veteran Affairs, the US Public Health Service, the National Health Service Corps, and the three branches of the military, namely the US Navy, US Army, and US Air Force. Although all the services actively recruit dentists and dental students to join their programs, only the military branches maintain detailed records of annual recruitment goals and the attainment of these goals. It is speculated that financial incentives offered by the military are the most crucial factors in the decision-making process of dentists and students as to whether or not to join the military; however, there have been no

studies examining the specific factors that influence the career decisions of potential recruits. Career decisions are made based on individual perceptions and circumstances, and these may or may not be influenced by military recruitment activities. Accordingly, qualitative research methods were used to identify, as broadly as possible, the perceptions of dental students who are about to begin their military service and dental officers who have just started their military careers. From this study, methodologies and incentives used by the military that can be adapted by dental academia to improve recruitment of faculty members may be identified.

BACKGROUND AND SIGNIFICANCE

I. Faculty shortage in dental academia

In 1999, a task force predicted a shortage in dental educator workforce(2). Since then, a succession of reports have been published to further clarify the magnitude of the problem, and the number of faculty position vacancies appeared to have increased(3-7). According to the most recent report, there were approximately 250 full-time and 24 part-time budgeted faculty positions vacant at the end of the 2004-05 academic year. In addition, 172 faculty positions were eliminated due to prolonged vacancy and budget constraints during the 2003-2005 period(7). Among current faculty, 31% are between the ages of 51 and 60 years and 25% are age 60 or older leading to an estimated 2,950 educators who may enter retirement in the next 5 years(7). Furthermore, for the last four years, faculty members have been leaving academic careers to enter private practice at an average rate of 360 per year, compounding the reduction of the already diminished dental academic workforce(4-7).

II. Situation specific to Pediatric Dentistry

Vacant pediatric dental faculty positions increased from 15 in 1995 to 39 in 2002(8), and 12 of these positions were eliminated in the 2003-04 academic year with two more eliminated in the 2004-05 year(7). A further decline is projected(8). At present, faculty vacancies tabulated by specialty showed that pediatric dentistry had the most at 29 positions(7). The shortage in pediatric dental faculty prompted 16 residency programs to hire

general dentists to teach pediatric dentistry, a finding that is consistent with an earlier report in which one-third of schools were found to rely on general dentists to teach pediatric dentistry(9). Although utilizing general dentists as pediatric dental faculty is an alternative, Seale and Casamassimo suggested that utilizing general dentists to provide faculty supervision may result in less complex patient care with instructions in more basic behavior management techniques that ultimately results in providing less than ideal training for dental students(9). This pediatric dental faculty shortage is compounded by the fact that while many current faculty members are nearing retirement, few graduating pediatric dentists choose a career in education or research(10). The need to focus on recruitment efforts in academic pediatric dentistry has become increasingly urgent.

III. Challenges in recruitment

Dealing with this net loss of dental educators is a major challenge for dental school Deans and is one possible reason that prompted these Deans to identify faculty recruitment and retention as the most pertinent or emerging issue in dental education(11, 12). Although vacant positions are announced in the classifieds section of many dental journals, a lack of response to advertised positions was reported as a major factor influencing the ability to fill faculty vacancies(3, 4, 7). Other factors include the rising cost of dental education and ensuing pressure of educational debt, as well as a continual increase in average private practice income that widens the financial disparity between the academic career and private practice. In 2001, over 55% of students carried an educational debt greater than \$100,000 after graduation from dental school(13). In the same year (2001) a pediatric dentist in private practice earned an average net income of \$294,430(14) while the average net income

was \$100,898 for a full-time junior faculty member with the rank of assistant professor, a salary roughly one-third that of the private practitioner(15). This salary discrepancy coupled with an economic climate in which there is a steady reduction of State and Federal funding support for higher education result in severe university budget and salary restrictions. For students, the educational debt continues to increase: latest survey of graduating seniors reported that the percentage of students with \$100,000 or more in student debt had increased to 67% in 2005, with 44% owing more than \$150,000(1).

Another challenge is an increased expectation of many universities that all faculty engage in research and scholarly activity. Many applicants who might be interested in clinical teaching have perceived the research requirements as an obstacle(6, 7). This perceived obstacle is often the result of a lack of understanding regarding the research process, a fear of research related activities, and/or limited experiences in research methodologies(16, 17). A recent study showed that students who participated in research projects during dental school were five times more likely to become dental faculty(18), perhaps as a direct result of having gained an understanding and appreciation for research that encouraged their inclination and increased their aptitude in academic dentistry. This result has lead to strategies aimed at enhancing dental student research involvement gaining greater attention from dental school administrators.

IV. Military dentistry

Speculation suggested that financial incentives are the most successful recruitment tools used by the military; however, the salary data do not support such a suggestion, especially when compared to the greater income to be gained from entering private practice.

Although military scholarships may have greatly reduced the financial burden of obtaining a dental education, the average salary of a junior military dental officer in 2001 was less than one-fourth the average net income of a private practicing general dentist(19). Thus, there must be other perceived benefits of a military dental career. For example, recruiters often emphasize a wide range of potential experiences that may be obtained by joining military programs(20). These experiences include participation in major physical training and combat exercises, commanding military units, developing administration and leadership skills, developing and honing clinical skills without the added pressures of managing a business, and the ability to travel and experience other cultures when stationed at foreign military bases. Each branch of the military also offers training in advanced dental specialties to attract students who wish to pursue such training, and the opportunity to conduct research(21).

For dental students and dentists, exposure to a military dental career can occur from many sources. Recruiters often visit dental schools to present information to students, and some students are introduced to the military services by their instructors or family dentists(22). Others obtain the information from display booths at dental conventions(23). Dental journals also publish articles discussing military dental careers(24-26). The Journal of the American College of Dentists published a series of articles on federal dental services in which the three branches of the military took the opportunity to highlight their programs(27-29). These articles provided brief histories of the inception of the military dental programs, the growth, as well as the current status of each dental corps. In short, the dental corps of all three military branches actively promote their programs to students and dentists using a variety of strategies and in many different settings.

IV. Summary

Dental education and the profession at large are in urgent need of qualified faculty members to continue a mission of training future practitioners and advance the art and science of dentistry through research and development. The shortage of faculty has already begun to have an effect on the quality of instruction in the discipline of pediatric dentistry. The economic climate and requirement for research appears to make academic careers unattractive, but the military services are able to recruit dental students consistently. The incentives and motivations that prompt students to join the military may exist in academia. For example, both are institutional entities that free their employees from the complexities of operating a small business and provide benefits that they would otherwise have to purchase on their own in a private practice setting. Dentists in both the military and academia are asked to take on additional administrative and teaching responsibilities. An observation that highlights the similarities between academia and the military is that military dentists frequently make successful transitions into academia, and by identifying relevant military recruitment methodologies and incentive packages, academic administrators may be able to implement similar measures to improve faculty recruitment.

GOALS AND OBJECTIVES

The goal of this study was to examine the recruitment methodologies of the military services and explore perceptions of students and dentists regarding their exposure to a career in the military dental corps. The following information was collected from the recruiting commands of each of the three military services as well as from current and prospective military trainees:

1. Military recruitment methodologies and their effectiveness;
2. Factors considered important to senior dental students who chose to serve in the military; and
3. Factors considered important to junior dental officers who had just started their military dental careers.

Based on the information collected, effective military recruitment methodologies that could be adapted to academic dentistry were identified.

METHODS

I. Military Strategies: Collection of Official Documentation

In order to determine the different strategies for recruitment used by the military and the effectiveness of these strategies, official documentation of activities related to recruitment was requested from the US Navy, US Army, and US Air Force. The process of requesting official documentation involved submitting Freedom of Information Act (FOIA, 5 U.S.C. 552) request letters to the respective heads of the three dental corps. The following specific documents were requested.

1. The yearly number(s) of dental officer vacancies that recruiters were asked to fill since 1997. This information provided the annual recruitment goals.
2. The number of dentists that were recruited since 1997 and the population pools targeted for recruitment. Specifically, information was collected on whether dentists were recruited from dental schools as dental student graduates, from private practices as experienced dentists, or from the re-signing past and current dental officers. Together with the data on the annual recruitment goals, this information provided a determination of the percentage of filled *versus* vacant positions and was a measure of the success of the military in meeting their recruitment needs.
3. A description of all recruitment activities which included, but were not limited to, school visits, television and radio advertisements, video presentations, mailings, and internet websites.

4. A description of incentive packages offered during recruitment activities. These packages provided information on the various recruitment perks and benefits that recruiters used to attract students and dentists.

II. Perceptions of Potential Recruits: In-depth Telephone Interviews

In order to explore those factors considered important by current and prospective dental officers in making their decision to join the military, in-depth telephone interviews (IDI) were used to gather qualitative data from new military dental officers and senior dental students. As opposed to other methods, IDI provide more in-depth information because of the focused interaction with each participant(30). The interviewer for this study was a social scientist/psychologist with experience and skill in focused discussions in both academic and corporate research settings.

The questions for the IDI were designed to elicit open-ended responses. Individuals participated in scheduled telephone interviews that lasted approximately 30 to 40 minutes. The subjects included the following groups:

1. Senior dental students selected from public, private, and private state-related schools of dentistry who were committed to enter military practice upon graduation; and
2. Junior dental officers in the Navy, Army, and Air Force Dental Corps who met the criteria of having completed more than two, but less than five, years of his/her first assignment.

The students were selected from a list of ADA accredited dental schools. E-mails soliciting participation and consent to participate were sent to administrators of all 56 U.S. accredited dental schools. These administrators then were asked to forward the letters to all

senior students who were committed to enter military service upon graduation. Interested students were instructed to contact the principal investigator (PI) via email. Consent to participate in the study was obtained and documented via email. To ensure that no school was over-sampled, no two participants from the same school were interviewed. For the military participants, lists of names of junior officers in the Army, Navy, and Air Force who met the inclusion criteria were requested from administrators of each of the dental corps. The officers then were contacted by email, and the first two officers from each corps who agreed to participate were consented as above and enrolled into the study.

The interviews were scheduled with the psychologist. Each interview began with a brief introduction during which the study was described. The interview questions probed the following areas:

- Initial awareness of military opportunities and the specific source;
- Primary reasons for joining the military;
- The branch of the military to which a commitment was made and the reasons for selecting that branch;
- Current status with the military; and
- Any regrets with the decision to join the military.

In addition, a hypothetical scholarship program mimicking the one offered by the military that would reward students for choosing an academic career was proposed to all the interviewees for their critique and consideration. All interviews were taped and the tapes then were transcribed for later review by the PI. Data collection was considered complete when the interviewer determined that additional interviews would yield no new information. Subjects received no compensation for their participation.

RESULTS

I. Official Documentation from the Military

The military recruitment fiscal year begins on October 1st and ends on September 30th. For example, the 1997 statistics represented the recruitment goals and the number of contracts signed from October 1st, 1996 to September 30th, 1997. All military documents that changed annually, such as pay charts and duty assignments, followed the same fiscal calendar. The Navy Recruiting Command, the agency overseeing the recruitment of US Navy personnel nationwide, returned a complete report with detailed statistics following submission of the FOIA request, but the Air Force and the Army provided only part of the information sought. The Army returned results for fiscal years 2001 to 2005 only without an explanation as to why data from 1997 to 2001 was not given. The Air Force representative returned very cursory data for 2003 and 2004. When pressed for more complete data, both the Army and the Air Force chose not to respond. All military branches engaged in similar recruitment activities using nearly identical incentive packages, but the Navy provided the most comprehensive report; therefore, the information presented here reflected the Navy program most completely.

Recruitment Targets

The Navy used a variety of recruitment strategies to achieve their goals, and they recruited from several different pools of potential dental officers. These included university

undergraduate students who were in pre-dental clubs, dental students, dental residents who received specialty training, private practice general dentists and specialists, dentists and specialists who were active Navy Reserve officers, and ex-military dentists who were no longer involved with the military but did not resign their officer commission -- the so-called “inactive reserve” -- dental officers. The Air Force and the Army targeted the same population as the Navy for recruitment and utilized very similar recruitment techniques, but each branch recruited from their own Reserve Services and not those of other branches.

Recruitment Strategies

The most commonly employed strategies by all three branches of the military were twice-yearly visits to dental schools, usually in the form of one-hour lunch and learn sessions, and information booths at dental conferences such as the ADA Annual Session and annual meetings of each of the recognized dental specialty groups. Occasionally, the Navy would select outstanding junior dental officers who were enthusiastic advocates of the Navy dentistry program and assign them to “Reverse VIP trips.” These trips involved special lunch and learn sessions for dental students at the schools where the visiting junior officers were graduates, and were designed to take advantage of the junior officers’ familiarity with the dental schools in the hope that they would be able to make additional connections with the students beyond that of an ordinary recruiter. Other strategies by the military services included direct mailings of print and other multi-media material such as CD’s and DVD’s to potential recruits. These mailings also pointed recipients to the Internet websites setup by the military. The military also used radio and television advertisements to reach as many people

as possible. Figure 1 illustrates the recruitment activities used by the military and the population pools targeted.

For those students and dentists who identified themselves as interested, the military utilized two additional tools. First, they hold face to face meetings in which the recruiter explained in great detail the benefits of being a military dental officer, including the life style and the additional training that would be provided for an officer. The student or the dentist is encouraged to ask questions and the recruiter attempts to address any concerns. Second, VIP trips were provided for “significant others” or family members of the potential recruit. These trips were designed to showcase the dental clinics, the military bases, the surrounding communities, and housing quarters to familiarize the recruits and their families with the military lifestyle.

Standard Military Compensations

The total compensation packages provided to dental officers of all three military branches were very similar. The specific information contained in these packages are described below.

1. The military offers an annual salary which is a combination of a base salary, a housing allowance, a subsistence allowance, and professional pay for medical and dental officers. The amount of pay an officer receives is based on several factors such as the rank, the number of years in military service, assignment location, and whether the officer is board certified by one of the American Dental Association recognized specialties. In addition, medical and dental specialists are given a specialty pay. Pay also may be given depending on the officer’s specific tour of duty. For example, a special monthly “Sea

Pay” is authorized for military personnel assigned to duty at sea. Dental officers whose assigned duties require separation from family members are given a “Family Separation Allowance”, and officers in designated Combat Zones are given “Combat Pay” and tax incentives. In addition, officers receive 30 vacation days and all federal holidays annually with no loss in pay.

2. Dental officers receive comprehensive healthcare benefits at no cost and their family members receive similar services at very low cost.
3. Dental officers are compensated for expenses incurred while attending approved continuing dental education courses. Officers also have the opportunity to pursue post-graduate or specialty training and receive full pay and allowances while in training. If officers are interested in pursuing higher education in other fields, full tuition assistance is provided if approved.
4. Similar to educational institutions and large group practices, the practicing dental officers have malpractice insurance provided by the military. They start a practice complete with equipment and an existing support staff. They do not have the stress of operating a business, which eliminates concerns regarding the patients' ability to pay or concerns regarding collections and dealing with insurance companies. In addition, as long as an officer maintains a current dental license in any State or US Territory, that officer has the ability to work in any State, territory, or foreign country where a US military base is present without having to meet additional licensure requirements.

Promotional Incentives

In addition to the standard compensation packages detailed previously, other incentives are promoted by recruiters to solicit interest from the dental community. For example, on joining the military, a dentist receives a \$30,000 signing bonus, and dental students who qualify for the Health Professional Scholarship Program (HPSP) receive scholarships that fully fund their dental education for two to four years (depending on terms of service contracts). The scholarships cover fees, tuition, books, instrument and equipment purchases, and give students a monthly living allowance. Post-graduate students pursuing specialty training are eligible for the Financial Assistance Program that covers required fees for the specialty training program and provides a stipend of over \$39,000 per year to the residents. This assistance is in addition to the other stipends that the residents may receive as part of their residency.

Besides the HPSP, two other programs are available to dental students. The first simply guarantees the student a job upon graduation with the same \$30,000 signing bonus an experienced dentist would receive. The second program, named the Health Services Collegiate Program, enrolls dental students into the military as enlisted personnel rather than officers and provides them a regular pay as enlisted soldiers. This status entitles the students to all the benefits of being in the military and allows them to accrue active-duty time in the military which can impact the amount of monthly pay they will receive when they graduate and become dental officers. For example, two officers with the same rank may differ in monthly pay by as much as \$1,000 if one officer has been with the Navy for four years and the other less than two. This difference can double if the students, during dental school, received two promotions in rank.

The military also recruits dentists into the reserves with various compensation packages. The terms can vary from person to person. The dental officers who are in the reserves fulfill their duty much like part-time faculty members; they live and work in the community, but they serve a certain number of days in the military. Figure 2 illustrates the compensations and promotional incentives emphasized by the military during recruitment activities.

Recruitment Statistics

The Navy Recruiting Command provided statistics in recruitment of dental officers from 1997 to 2005. Table 1 shows the recruitment record for individual programs as well as the overall recruitment success. The Army recruitment record is shown in Table 2, and the Air Force record is shown in Table 3. In addition to the overall data, separate information was provided prior to the World Trade Center disaster in New York that occurred on September 11th, 2001. The separate data were given to highlight the impact of war in military recruitment effectiveness. The recruitment success of the HPSP did not change much in all three branches of the military subsequent to war but the recruitment success of other programs decreased considerably.

II. In-depth Interviews

Telephone interviews with senior dental students and military dental officers were continued until the interviewer judged that no new information was being provided. At that time the data collection was considered complete. Figure 3 illustrates the end study sample that was comprised of ten dental students and six military officers. Of the ten dental

students, six were from public dental schools, three from private dental schools, and one from a private state-related dental school. Two officers from each of the three military branches comprised the junior officer sample group. All student interviews were conducted between November 2004 and February 2005 and the military officers were interviewed between November 2004 and April 2005. The interviews were transcribed by clerical staff and subsequently coded and reviewed by the PI for identification of major themes.

Initial Awareness of Military Opportunities and from What Specific Source

It was apparent from the interviews that the awareness of military dental career opportunities, prior to or, during the first year in dental school was widespread. Students may have had prior affiliations with the military either personally or indirectly through a family member, and they were proactive in seeking a military program as a way to cover dental school expenses. Military recruiters frequently presented lunch and learn sessions during which the students obtained information about the programs. Additional influences came from classmates who have been recipients of military scholarships or from suggestions by professors and/or family dentists who had military experiences. Undergraduate organizations such as pre-dental clubs and academic advisors were another avenue for information, and military presentations were included frequently as part of new student orientation in dental schools. No mention was made of television/radio advertisements or information booths at dental conferences as being the initial source of awareness regarding military dental careers.

Sample Response from Dental Students:

I come from a military family you know, [and] the option was presented to me... I went to each branch and I know individuals in each branch and I just wanted to see what each would entail... [Then] during orientation they do all kinds of presentations on financial aid, and what to do in [the city where the school is], where to live, etc. And part of that program is they have the military come in and speak. Then there were the lunch and learns.

Sample Response from Military Dental Officers:

I was accepted to dental school and then started thinking about how I was going to pay for it and I talked with the pre-dent/pre-med advisor at our school and he gave me one number for the Army and I called them up and the Air Force and Navy recruiters. Then there was the free lunch with a pretty good recruiter.

Primary Reasons for Joining the Military

Alleviation of indebtedness was clearly a major reason for joining the military but it was not the only reason. Other reasons that influenced career considerations and which were cited frequently included the following:

1. The military option provided a sense of security for the students by guaranteeing employment immediately upon graduation and giving full healthcare benefits along with disability and malpractice insurance.
2. Serving in the military satisfied patriotic sentiments and provided the dentists with a certain amount of prestige that was perceived as attractive to future employers or patients.
3. The military provided post-graduation residency opportunities in both general practice and specialty training that students and dentists could take advantage of.
4. The opportunity to practice dentistry in a protected environment was appealing because as new graduates they could concentrate on sharpening their clinical skills without the

need to worry about overall practice management issues such as malpractice insurance, production, collection, and personnel.

5. As a military dentist, one could take as much time as needed to perform dental procedures as well as consult and learn from other experienced dentists without negative consequences related to financial compensation.

Other motivators included opportunities for domestic and international travel and station assignments, flexibility and convenience of a short-term employment, and a chance to avoid making long-term commitments while continuing to deliberate the preferred type of long-term employment or the place to settle.

The standard compensation offered by the military for a career and the \$30,000 sign-on bonus were not included in the list of motivators for a military career choice. This result may have been because the interviewees were generally scholarship recipients and, as such, would have been ineligible for a sign-on bonus.

Interestingly, the participants offered at least three reasons that attracted them to the military that were not listed in the official military documents as points that recruiters should emphasize, namely, the prestige and patriotism associated with serving in the military, the sense of security in having a job with no business associated expenses, and the opportunity to sharpen clinical skills while learning from more experienced dentists.

Sample Response from Dental Students:

Financial was the primary reason for me to investigate this [military opportunity] but I would have been interested even if there had not been those incentives. When I have lunch with my friends in dental school they all kind of expressed to me that they wished they would have looked into something like this [because] first of all it is a job opportunity. Upon graduating dental school even though you may have your degree you are not guaranteed work.

You have to go out there and sell yourself; find an office if you are not starting up your own practice. The Air Force has it all ready to go. They provide the assistants for you, the patients, the instruments... everything is ready to go so that is definitely an attractive option immediately graduating from dental school. The second thing is I think it is pretty prestigious to say that you are a part of the Air Force. I am going to be a captain [and] I think that is pretty important to have on my resume... And you are doing this for your country. The Air Force is a big team. It is a cohesive unit that is going to make those first couple of years out of dental school easier for me, a learning experience where I get to learn from more experienced officers and fine tune my trade.

Sample Response from Military Dental Officers:

While I was in dental school I thought about how much money I was going to owe so right after my first year I started looking into [military opportunities]. So it was the money, and the fact that I really didn't know exactly what I wanted to do after I got out of dental school. I thought I could join for three years and delay that decision for a little while. I thought maybe I could travel a little bit. And they seemed to have a good opportunity for advanced education. I [ended up] doing an AEGD [in the Air Force]. I guess I [felt that] I would gain a lot of clinical experience versus jumping right into a private practice from dental school... a lot of times you aren't sure of your skills and you feel very inept as a dentist at that point so I knew that in the Air Force you are still surrounded by a lot of good people who can help you and people who can answer questions for you; so a much more protected environment.

The Branch of the Military to which the Commitment was Made and the Reasons for Selecting that Branch

The reasons that influenced the selection of a branch of service appeared to be personal preferences and a perceived lifestyle differences between the services. The Air Force was perceived to have a more comfortable lifestyle while the Navy was perceived to have better clinical dental programs. The number of years of dental school cost covered by the military scholarships also played a part in the choice to reject or pursue the Air Force because the Air Force only offered scholarships for three years or less. As such, participants who chose the Air Force would have needed to finance their first year of dental school on

their own. This was an important issue because the major purchase of text books and dental equipment occurs during the first year of dental school, making this year the most expensive for students.

Recruiter effectiveness and responsiveness appeared to have made a difference in the choice of a military branch. Students and officers reported either being impressed with the recruiters from the branch they eventually joined or they reported negative feelings toward a particular branch because the recruiter was not helpful. Occasionally, timing was an issue. One student chose the Air Force because the Air Force offered him a position and wanted a response from him before the Navy or Army had time to consider his applications.

Sample Response from Dental Students:

[I chose the Air Force because] I want to serve my country but I don't want to be away from my family, [so] I didn't want to find myself on an aircraft carrier for six months away from my family... just talking with lots of different people I have heard that Army doesn't treat their people well. And then there was the family history with the Air Force which played probably the largest role in [my decision].

Sample Response from Military Dental Officers:

[I didn't look into the Army at all and] a lot of times the Air Force only offers three years [of scholarship support] but the Navy has four year programs; and if you are going to do it, you might as well have everything paid for. Plus Navy dentistry provided a better opportunity in experience clinical wise, so that was what I was looking at.

Current Status with the Military

Eight out of ten student participants were accepted into a post-graduation residency program with the military. One applied but had not been accepted and the question was not

asked during the interview of another participant. Of the eight students accepted to residency programs, six were committed to an AEGD program, one to a GPR, and another accepted into a periodontics specialty program. Two officers had fulfilled their active duty commitments and had left the military service although they were still serving as reservists. The rest of the officers either were serving active duty commitments or were enjoying the lifestyle and had no plans to leave the military. Four officers took advantage of the post-graduate training programs that their services offered and five of the six officers commented on how much they were able to learn and develop as a clinician during their years in the military dental corps. The one remaining officer was a seasoned clinician in a dental specialty who used to be a full-time faculty member at a dental school and the development of clinical skills was not an issue.

Sample Response from Dental Students:

I am very much looking forward to [starting my career in the Army]. I got into the Army periodontal specialty program and the Army specialty programs are very highly regarded in all circles, I think. I will be graduating in May so I'll be starting with them in July.

Sample Response from Military Dental Officers:

I am almost at my two year mark [into a four year commitment]. It has been a good experience. Within my two years of Navy Dentistry I have learned more than I had ever learned in dental school or anything like that, [including] leadership skills, and that kind of helps out with private practice too because you have to lead your staff in making sure that things are done correctly. So I've gotten more of the business aspect towards dentistry along with the clinical. I wouldn't make a career out of it – I am not the military type at all – there is a lot of taking orders, certain freedoms you do not have... It just isn't for everybody.

Personal Regrets for Joining the Military

The responses from study participants ranged from having no regret whatsoever to having serious concerns about their future career directions. One concern raised by the students centered on the possibility of being sent to regions where the military was engaged in armed conflict. Reflections from dental officers on this issue differed widely. Concerns included becoming proficient in only a few areas of clinical dentistry, mainly simple restorative, fixed prosthodontics, and exodontia treatment, and the salary was not as good as anticipated. A lack of experience in removable prosthodontics and in treating pediatric patients as well as an absence of medically compromised patients was a concern to those participants who had plans to leave the military to enter private practice. It also was clear that the military was not a good career choice, financially--interviewees noted that dentists could make much more money outside of the military. The biggest complaint, however, centered on the recruiters who failed to disclose, or misrepresented the highly regimented and disciplined military lifestyle prior to finalizing the scholarship contracts.

Sample Response from Dental Students:

I am real nervous about [being sent to the war] if that is your question. I want to serve my country but if I end up sitting in tents for a year in Iraq that is not going to be a pleasant experience for me.

Sample Response from Military Dental Officers:

[Before I committed,] I asked deliberate questions like 'Will I be deployed?', 'What is expected of me?', and 'Will I have to train with other soldiers?' I was told 'No', 'You don't have to do anything except be tied to a chair for your commitment.', and 'Never, you're a dental captain... as a dentist you don't have to do anything.' [However, now] I have to go to the NBC [non-biological chamber] once a year and I've already been gassed twice. I have to qualify every year on the M16 and M9 weapons. I have a 12

miles road march with full "battle-rattle" (military standard of 35lbs) coming up soon. I go to circuit training once a month on military "garbage."..... I train with whoever is there for the day... meaning other officers or enlisted [soldiers]. I have to attend PT [physical training] at 5:00 am at least once a month. Pass a Physical Fitness Test four times a year and make the weight standards as well... So in retrospect... my recruiter was full of it.

Views on a Hypothetical Scholarship Program for Academic Dentistry, Modeled after the Health Professions Scholarship Program

A mix of reactions was elicited when a hypothetical scholarship program for academic dentistry was presented to the participants. They showed great interest in the described program as another possible opportunity for debt relief, but voiced many reservations and expressed skepticism. In general, the teaching aspect of an academic career was considered enthusiastically but the research component was deemed as prohibitive and wearisome. Interviewees suggested that such a program would definitely be interesting to classmates who exhibited an aptitude in teaching, research, and administration, but to those who were interested in developing clinical proficiency to prepare for private practice, the program would not be attractive. The perception was that academia, with its teaching, research, and service activities, would not provide as much time for clinical practice. Therefore, participants suggested that a residency program or some additional clinical training program be part of the scholarship to make up for the deficit in clinical experience. Additionally, allowing the scholarship recipients at least two days per week for private practice would make the scholarship program more attractive.

Mobility appeared to be a concern to the student participants. Sentiments were expressed that it was very important for the program not to require a scholarship recipient to remain at the same school at which they were trained. The perception was that if the

scholarship recipient remained as faculty at the same dental school, he or she would never be treated as an equal by other faculty members who had always scrutinized and evaluated their performance. Particularly worrisome was the potential that faculty administrators would simply give the worst tasks to the new graduate/faculty member. In addition, the opportunity to gain a different perspective by going to another dental school to fulfill their teaching commitment was mentioned as a component that may increase the appeal of the hypothetical scholarship program.

Sample Response from Dental Students:

I think [the hypothetical scholarship program for academia] would be appealing. I think people would jump on it because for those who are unsure of what they want to do it would be a nice avenue to teach. It will increase the amount of educators, but I don't think it will help the students; I just don't think students directly coming out of dental school have any experience at all to teach. So if they provided additional training like a residency, it would be very attractive. That type of experience would also be very important for somebody who may want to leave after their commitment and go into private practice. If I thought I wasn't going to come out as a significantly better clinician then it would be unattractive. Also, I don't know if I would have wanted to stay at the same school. Some instructors make our lives pretty miserable, especially the first two years, and the idea of spending another three years here would have killed the deal for me. I want to do something else. I think that going to another school and getting another perspective on dentistry would be appealing to me. So having the flexibility of being able to choose the University you want to be at would be important.

Response from Military Dental Officers:

I probably would have checked into [the hypothetical scholarship program for academia] but I don't know. I am not big into research; I wanted to do dentistry so [I would] probably not [pursue it]... If they tell you they are going to pay for your dental school, of course you are going to hear them out but I would have chosen the military over it in a second. I definitely could see this program being very appealing to other students though, but not everybody is cut out for it. I can think of many people I would hope never ever would teach in a school.

DISCUSSION

By requesting official military documents and conducting in-depth interviews with senior dental students and military dental officers, it was possible to examine military recruitment methodologies and identify strategies and incentives that influenced the study participants' decision making process for joining the military dental corps. It would appear that those who committed to the military dental corps were familiar with the military through personal or familial experiences, and such opportunities were actively sought after. Nevertheless, attending lunch and learn sessions was useful in gaining detailed information regarding the military dental programs, and recruiter attitude and enthusiasm can be influential in the process of selecting a branch of service.

Without a doubt, the respondents saw the military as a way to escape educational indebtedness; however, active duty service was valued as an opportunity to continue learning and improving clinical skills. The participants regarded the military service as a worthwhile investment, a preparatory stage where one is sheltered from the complexities of operating a small business and the potential downfalls of inexperience. At the same time, the military provided leadership training and opportunities to gain managerial experiences, all of which were viewed as important skills that would make a private practice successful. The familiarity with the military lifestyle made the rigidity and disciplinary culture more tolerable, and the idea of being part of a team of dentists who interact with and learn from each other was highly valued. The participants felt that they look forward to become highly skilled clinicians when they finish their commitments. It would seem that those who pursue

a dental career in the military were focused on a private practice career after their military service and would not find an academic commitment appealing because involvement in dental education was not perceived to be helpful in preparing for private practice.

Such a conclusion, however, does not mean the recruitment methodologies that work well for the military will not be applicable to academia in attracting students and dentists. It simply suggests that those who have a strong inclination towards private practice may not find academia an attractive alternative to prepare for a career in private practice. Many interviewees stated that they knew classmates who would have been excited about a scholarship that would prepare them for an academic career. The implications are that the same recruitment methodologies, adapted by academic administrators and used effectively, could encourage those individuals who had an inclination to teach, conduct research, or administrate to join a dental faculty. Many aspects of the military program that were cited as attractive exist in the academic field; in fact, excluding the scholarships and the patriotic sentiments, and perhaps adequate clinic time to sharpen skills, dental academia offers all of the factors deemed appealing by our interviewees. Just like the military, the dental faculty can avoid the complexities of operating a small business and dental institutions provide healthcare, disability and malpractice coverage that faculty would otherwise have to purchase on their own if they were in a private practice setting. Specialists from all the disciplines are present and accessible and there are plenty of opportunities to learn and gain expertise. Faculty also travel often to attend academic conferences that are held in various locations and expenses are usually covered by the institutions.

As stated by one of the dental officers interviewed, “If they tell you they are going to pay for your dental school, of course you are going to hear them out.” Stakeholders in dental

education must implement financial incentives, in the form of debt relief or elimination, in order to make academic careers attractive to dental students and specialty residents. The ADEA senior surveys have shown a continual rise in student indebtedness and the pressures of debt influencing students' career plans immediately following graduation(1). If a scholarship program similar to the HPSP offered by the military was to be offered by academic dentistry, that portion of the student population with an aptitude and inclination to become faculty members would have the potential to do so without suffering financial consequences. In fact, for the year 2001, the average annual salary of an assistant professor was more than double that of a junior military dental officer with less than four years of active duty service, making assistant professorship a more financially attractive than a military junior officer appointment.

Stakeholders in dental education should also consider the establishment of a national recruiting agency, similar to the Recruiting Commands of the military, which would oversee the recruitment efforts for all dental schools. Such an agency could dispatch recruiters to academic institutions and give presentations to increase awareness of the need for dental faculty. ADEA has taken a lead in the establishment of the Academic Dental Careers Network but more needs to be done beyond setting up a depository for individual CV's and institutional position announcements in cyberspace. A proactive approach is needed in the form of presentations given to all members of the dental community, beginning with the ADA, AADR, ADEA, and the various specialty organization annual sessions and extending to luncheons at county dental society meetings and dental schools. Such presentations could provide an update of the current faculty workforce shortage, highlight the merits of an

academic career, and invite the attendees to participate in the education of the next generation of dentists.

Attention given to the faculty shortage issue by the ADA over the last few years was important. Since 2001, articles publicizing the academic workforce shortage and the corrective efforts have regularly graced the pages of the ADA News, a publication sent to all members of the ADA. The awareness raised by the articles may have been part of the reason that over the last three years, more than 50% of new faculty hires have come from private practitioners(7). To encourage and support that trend, the Academy for Academic Leadership, a private organization geared toward helping private practice dentists who wish to transition to dental academia, was established and recently posted an advertisement in the ADA News(31). The academic community should continue to collaborate with the ADA and other dental organizations to cultivate the private practice sector that is rich in clinical expertise and may be willing to contribute.

The importance of interpersonal relations cannot be overlooked. Many students and officers interviewed recounted being familiar with the military lifestyle and being encouraged by family, friends, and their personal dentist to explore military opportunities. Some participants also stated that recruiter responsiveness or the lack thereof influenced their decision to pursue or reject a particular branch of service. It is upon the shoulders of current academicians to share with students, residents, and the dental community at-large their enthusiasm for teaching, research, and service. Not only by ways of formal presentations, but also in casual, personal conversations where the challenges and rewards of being an academician are conveyed. Then, for those who show the desire and the aptitude for an academic career, training and support should be provided. In addition, a mentor could be

assigned to help guide them to opportunities that would prepare them for a career in academia. Unfortunately, this study confirmed the results of an earlier work(16) where dental students perceived academic environments to be cold and negative primarily because of the attitudes of academicians. The sentiments were strong enough that the students would give up the incentive of a full-ride scholarship rather than staying at their own institutions as faculty. Teachers must remember that they are in a position to leave lasting impressions on the minds of budding dentists. A seed, well planted and carefully cultivated, may blossom into the next expert instructor, brilliant researcher, or skillful administrator. It is imperative that students with such potential be identified early and continually supported and encouraged so that an academic career, even with its less appealing financial compensation, will be perceived as a rewarding choice none the less.

CONCLUSION

The recruitment methodologies used by the military dental services have been shown to achieve consistent results over the past several years. Although recent armed conflicts in the Middle East has diminished the effectiveness of several recruitment programs, the HPSP continue to show success in recruiting dental students. Personal experiences with the military and lunch and learn sessions appeared to be the most effective means of reaching students, and the most attractive incentives included the following:

1. Scholarships that eliminated or greatly reduced future indebtedness.
2. A sense of security for the students by guaranteeing employment immediately upon graduation and giving full healthcare benefits along with disability and malpractice insurance.
3. Satisfies patriotic sentiments but also endows the dentists a certain amount of prestige that is attractive to future employers or patients.
4. Post graduation residency opportunities for students and serving dentists.
5. Opportunity to practice dentistry in a protected environment where malpractice, production, collection, personnel, and overall practice management issues are avoided.
6. Able to continue learning from other dentists and have the opportunity to sharpen their skills without suffering financial consequences.

It is recommended that a carefully crafted scholarship program that would reward students for choosing an academic career be explored. Concerted efforts from the ADA, AADR, ADEA, and other stakeholders in dental education should consider the establishment of a central agency for recruitment of students and dentists to academia. Many incentives offered by the military that are attractive to the subjects in this study already exist in an academic career. Recruitment methodologies similar to the ones used by the military could be adapted by academic administrator and other stakeholders in dental education. Although it is unclear that such an effort could reach those with attitudes and aspirations similar to the participants in this study, students and dentists who have inclinations and aptitudes for teaching, research, and administration may be responsive to the use of recruitment strategies and incentives modeled after the military services.

Table 1. Navy dental officer recruitment statistics from 1997 to 2005.

Year	General Dentist		FAP ^a		HSCP ^b		Dental Student		Recall ^c		HPSP ^d		Dental Reserves ^e		Overall	
	Attained	Goal	Attained	Goal	Attained	Goal	Attained	Goal	Attained	Goal	Attained	Goal	Attained	Goal	Attained	Goal
1997	32	31	3	6	97	110	42	60	N/A	N/A	N/A	N/A	N/A	N/A	174	207
1998	36	45	0	5	121	110	28	31	N/A	N/A	N/A	N/A	N/A	N/A	185	191
1999	13	20	8	8	114	119	13	13	4	5	92	91	32	NA	276	256
2000	13	5	3	3	75	90	17	20	3	3	23	23	54	NA	188	144
2001	8	8	1	3	33	50	31	20	5	5	63	63	65	50	206	199
2002	9	10	2	6	33	50	28	30	7	10	70	70	38	33	187	209
2003	7	39	4	6	25	55	19	35	6	12	80	80	33	33	174	240
2004	6	15	1	6	23	30	1	10	3	10	90	98	7	31	131	200
2005	6	5	0	6	22	26	0	10	3	10	69	85	7	18	107	160
Total	130	178	22	49	543	640	159	229	31	55	487	510	204	165	1628	1806
Pre-9/11 average:		93.58%	60.00%		91.86%	90.97%	92.31%		100.56%	130.00%	103.21%					
Post-9/11 average:		40.58%	29.17%		63.98%	32.94%	45.24%		92.79%	73.91%	74.04%					
Overall average:		73.03%	44.90%		84.84%	69.43%	56.36%		95.49%	90.91%	90.14%					

- a. Financial Assistance Program – awards residents being trained in a specialty. Program covers required tuition and fees in addition to a \$39,000 stipend.
- b. Health Services Collegiate Program – enrolls dental students into the military as an enlisted personnel and provides a rank and pay and benefits according to rank. Students earn service time in the military and can increase in rank while in school, resulting in a higher starting salary once commissioned as a dental officer.
- c. Dentists formally in the military who did not resign their commission even though they otherwise were not associated with the military in other ways.
- d. Health Professions Scholarship Program – awards dental students full tuition and fees, provides reimbursements for necessary books and equipment cost while in dental school, and provides approximately \$1,200 a month as living allowances. Currently, Army and Navy both have 3 or 4 year programs, but Air Force only has a 3 year program.
- e. Dentists recruited into the Reserves forces who only commit a certain number of days to the military per year. They live in the community and maintain their own careers.

Table 2. Army dental officer recruitment statistics from 2001 to 2005.

Year	General Dentist		Specialty Dentist		HPSP		Dental Reserves		Overall	
	Attained	Goal	Attained	Goal	Attained	Goal	Attained	Goal	Attained	Goal
2001	15	20	5	18	88	87	115	100	223	225
2002	11	20	3	18	94	93	94	100	202	231
2003	16	25	3	10	99	97	30	35	148	167
2004	9	30	1	10	119	118	18	35	147	193
2005	16	30	2	12	83	93	11	36	112	171
Total	67	125	14	68	483	488	268	306	832	987
Pre-9/11 average:	75.00%		27.78%		101.15%		115.00%		99.11%	
Post-9/11 average:	49.52%		18.00%		98.50%		74.27%		79.92%	
Overall average:	53.60%		20.59%		98.98%		87.58%		84.30%	

Table 3. Air Force dental officer recruitment statistics for 2003 and 2004.

Year	Dentists		HPSP		Overall	
	Attained	Goal	Attained	Goal	Attained	Goal
2003	10	NA	31	NA	41	101
2004	32	NA	69	NA	101	94
Total	42	NA	100	NA	142	195
Pre-9/11 average:	NA		NA		NA	
Post-9/11 average:	NA		NA		72.82%	
Overall average:	NA		NA		72.82%	

Figure 1. Military recruitment strategies and target population pools

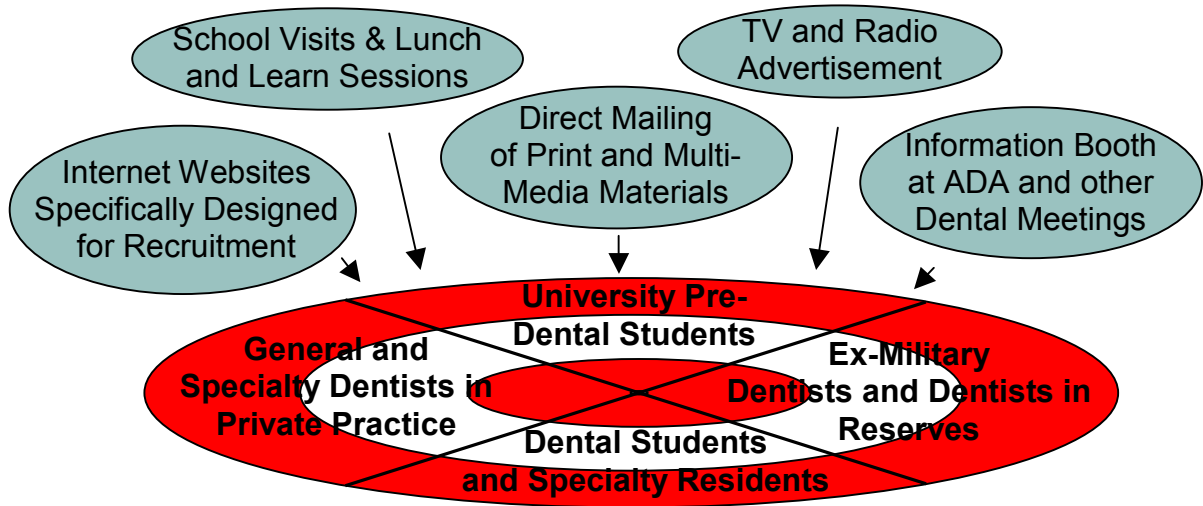


Figure 2. Incentives emphasized during military recruitment activities

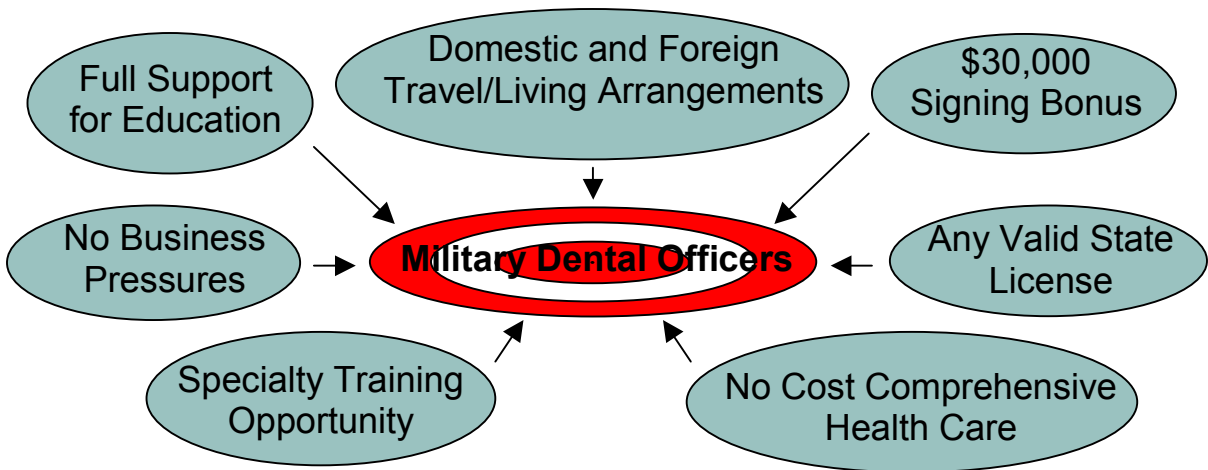
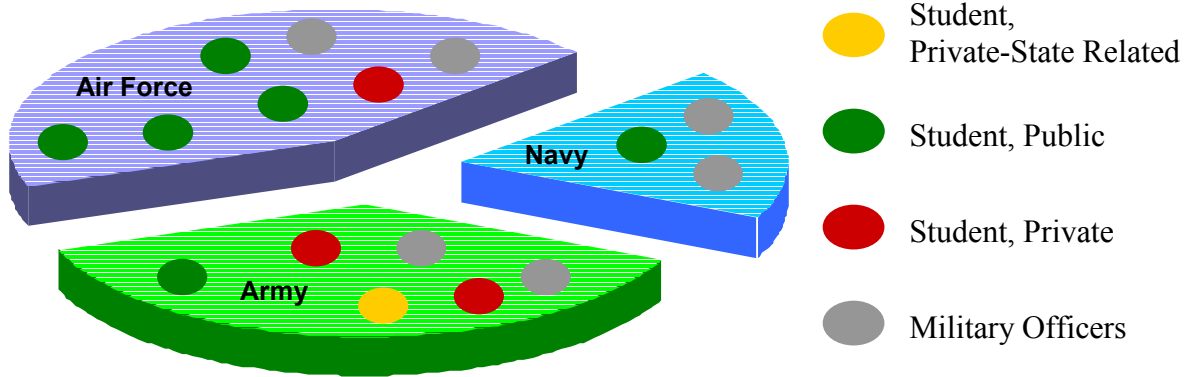


Figure 3. Composition of study sample (n = 16)



APPENDIX I: Subject Recruitment Letter

THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

DEPARTMENT OF
PEDIATRIC DENTISTRY

January 6th, 2005

Dear Student:

Your Opinion Counts!

A research project being conducted at the UNC School of Dentistry is looking for volunteers to express their opinions regarding the sign-on process with the dental corps of the military. Because you have committed yourself to enter the military upon graduating from the dental school, ***we wish to talk to you!***

The results of this research will help the military branches, other government services, as well as dental school administrators to better understand the decision making process that students go through while selecting career paths. Should you agree to voice your opinion, I will set up a time that is convenient for you and a research associate would call you and conduct a telephone interview lasting no more than 45 minutes. Rest assured you will not be identified in the final report in any way, and all records will be kept confidential. You can refuse to answer any question at anytime during the interview if you are not comfortable.

If you have other questions about this research project, or if you agree to being interviewed, please contact me at hsur@dentistry.unc.edu Thank you for your help!

Sincerely,

Ronald H. Hsu, DDS
Resident
Pediatric Dentistry
UNC Chapel Hill

APPENDIX II: Consent to Participate

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

University of North Carolina School of Dentistry

*i. Title of Project: **Recruitment of Dentists by Military Services: Implications to Academia***

*ii. Department: **Pediatric Dentistry***

*iii. Principal Investigator: **Ronald H. Hsu, DDS** phone number: **919-966-2742***

*iii. Co-Investigator: **Carroll-Ann Trotman, BDS, MA, MS** phone number: **919-843-1760***

You are being asked to participate in a research project being conducted with the approval of the University of North Carolina – Chapel Hill, School of Dentistry. The following information is provided so that you can make an informed decision about your willingness to participate.

1. Purpose

The purpose of this study is to determine the perceptions of senior dental students and junior dental officers regarding different recruitment strategies used by the military services. Such insight will help us understand the decision making process that students go through to select careers.

2. Procedures

Your participation in this study will include the following:
At a mutually agreed upon time, an interviewer will contact you by telephone and discuss the issues pertinent to recruitment with you for about 40 to 60 minutes.

3. Exclusions

You should not participate in this study if any of the following apply to you:

1. You have no firm commitment with any branch of military service.

4. Confidentiality

All records will be kept confidential. However, there is no guarantee that this information cannot be obtained by legal process or court order. You will not be identified in any reports and publications.

5. Rights of Non-participation or Withdrawal

You can withdraw from this project at anytime.

6. Assurance that Questions have been and will be Answered

If you have other questions about the research, you may contact Ronald H. Hsu at 919-966-2742 or hsur@dentistry.unc.edu

This project has been reviewed and approved by the School of Dentistry Committee on Research Involving Human Subjects. If you have any questions of the Committee, you may contact the Chairman through the IRB Coordinator, Room # 2056, Old Dental Building, 919-966-1165.

APPENDIX III: Interview Guide

- A. Introduction
- Thanks for participation
 - Confidentiality and limits to confidentiality
 - Permission to audiotape
 - Description of purpose
- B. When did you become aware of military dental opportunities? Probe (if not offered):
- Prior to application, while applying, after acceptance, after start of dental school?
(For officers only: post-graduation?)
- C. How did you become aware of military opportunities in dentistry?
- Mailings from military?
 - Phone calls?
E-mails?
 - Recruiter visits? (to school, providing lunch and a short presentation)
 - Friends/peers?
 - Family?
 - Conference booth?
 - Internet?
 - Base/facility visits (with or without significant other)?
 - A military dental officer giving a talk at your school?
- D. When did you sign on with the military? Probe (if not offered):
- Before you were accepted into dental school
 - During first year
 - During second year
 - During third year
 - Just signed on this year
 - Any specific circumstances that influenced your timing?
- E. Why did you sign on with the military? Probe (if not offered):
- Cost of dental education
 - Job security upon graduation
 - Specialty training opportunities
 - Sense of insecurity/lack of confidence with student's ability to join a practice or begin a new practice
 - Life-style
 - Travel opportunities
 - Patriotism
- F. What service did you sign with, and why? Probe (if not offered):
- Whether the student compared across the three services
 - Special reasons associated with the service they signed with

- Special reasons associated with not signing with the other two services

G. Any regrets about signing?

H. If dental schools offer you a similar deal in exchange for a five-year commitment to stay in academia upon graduation, would you take the offer over your current offer? Why or why not?

- Issues related to research
- Issues related to teaching
- Issues related to clinical work

REFERENCES

1. Chmar JE, Weaver RG, Valachovic RW. Annual ADEA Survey of Dental School Seniors: 2005 Graduating Class. *J Dent Educ* 2006;70:315-39.
2. Bertolami ea. Report of the AADS President's Task Force on Future Dental School Faculty. American Association of Dental Schools, 1999:1-15.
3. Weaver RG, Haden NK, Valachovic RW. Dental school vacant budgeted faculty positions: academic year 2000 - 2001. *J Dent Educ* 2001;65:1291-302.
4. Haden NK, Weaver RG, Valachovic RW. Meeting the demand for future dental school faculty: trends, challenges, and responses. *J Dent Educ* 2002;66:1102-13.
5. Weaver RG, Haden NK, Valachovic RW. Dental school vacant budgeted faculty positions, academic year 2002-03. *J Dent Educ* 2004;68:574-80.
6. Weaver RG, Chmar JE, Haden NK, Valachovic RW. Dental school vacant budgeted faculty positions: academic year 2003-04. *J Dent Educ* 2005;69:296-305.
7. Chmar JE, Weaver RG, Valachovic RW. Dental school vacant budgeted faculty positions: academic year 2004-05. *J Dent Educ* 2006;70:188-98.
8. Casamassimo PS, Feigal R, Adair SM, Berg J, Stewart R. A snapshot of the U.S. postdoctoral pediatric dentistry faculty workforce, 2002. *J Dent Educ* 2004;68:823-8.
9. Seale NS, Casamassimo PS. U.S. predoctoral education in pediatric dentistry: its impact on access to dental care. *J Dent Educ* 2003;67:23-30.
10. Roberts MW, Seale NS, Lief S. Career preferences of pediatric dentistry advanced education students. *Pediatr Dent* 1997;19:104-8.
11. Valachovic RW, Weaver RG, Haden NK, Robertson PB. A profile of dental school deans. *J Dent Educ* 2000;64:433-9.
12. Chmar JE, Weaver RW, Ranney RR, Haden NK, Valachovic RW. A profile of dental school deans, 2002. *J Dent Educ* 2004;68:475-87.
13. Weaver RG, Haden NK, Valachovic RW. Annual ADEA survey of dental school seniors: 2001 graduating class. *J Dent Educ* 2002;66:1209-22.
14. 2002 Survey of Dental Practice—Pediatric Dentists in Private Practice. Chicago: American Dental Association, 2004.
15. Faculty Salary Survey Summary Report: Guaranteed Annual Salary: 2002-2003 Total Compensation: 2001-2002. Washington, DC: American Dental Educaiton Association:14.

16. Trotman CA, Bennett E, Scheffler N, Tulloch JC. Faculty recruitment, retention, and success in dental academia. *Am J Orthod Dentofacial Orthop* 2002;122:2-8.
17. Edmunds RK. Strategies for making research more accessible to dental students. *J Dent Educ* 2005;69:861-3.
18. Rosenstiel SF, Johnston WM. Goals, costs, and outcomes of a predoctoral student research program. *J Dent Educ* 2002;66:1368-73.
19. BASIC PAY - Effective July 1, 2001.
20. Greenwald J. It's not just a job: the adventure of military dentistry. *Dentistry* 1990;10:18-20.
21. Robinson BE. Postgraduate educational opportunities in the military services. *J Am Coll Dent* 2000;67:19-20.
22. Russell R. You can call her 'Doctor' or you can call her 'Captain'. (Captain Carolyn L. Shreve). *Dent Stud* 1979;58:41.
23. Jochen DG. Forward march! *Dent Econ* 1981;71:98-101.
24. Nathan RA. A dental career in the Federal Government. *N Y State Dent J* 1979;45:544, 546.
25. Miller AG. Career pathways in dentistry. *Dent Update* 1999;26:82-3.
26. Castillo D, Lazarus M. Unlocking your career vision. *Dentistry* 1997;17:4-6, 8.
27. Murray GH, Hancock AF, Fancher J, Chamberlain TM. The Air Force Dental Service--cross into the blue. *J Am Coll Dent* 2003;70:4-7.
28. Webb JG, von Gonten AS, Luciano WJ. Providing care for America's Army. *J Am Coll Dent* 2003;70:8-11.
29. Woofter DD, Peters A, Kvaska G, et al. Navy Dental Corps: ninety years. and forward. *J Am Coll Dent* 2003;70:12-5.
30. Greenbaum TL. *The handbook for focus group research. Rev. & expanded ed.* San Francisco, CA: Jossey-Bass., 1993.
31. *ADA News* 2006;37(5):18.