A Profile of Dental School Deans, 2014

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Abstract: To develop a profile of current U.S. dental school deans and report their perceptions, challenges, and opportunities that should be addressed in the leadership development programs of the American Dental Education Association (ADEA), data were gathered using a web-based survey organized into seven content areas. In 2014, the deans of all accredited dental schools in the U.S. including Puerto Rico were invited to participate in the survey. The response rate was 86% (56/65). A majority of the deans were male (N=44; 79%) and white/non-Hispanic (N=49; 88%); all reporting degrees held a DDS/DMD (N=54; 100%). Just over half were between the ages of 46 and 55 (N=31; 55%) when they first became a dean. The mean age of these deans was 61.4 years, with a range of 48-72. The respondents reported that school administration/management, fundraising, students, the academic environment, leadership development, and faculty had a high level of influence on their job satisfaction. Communication, conflict resolution, and finance were reported as the most important knowledge areas. A majority reported being better prepared for clinical education and student relations than fundraising and research when they took their positions. They responded that finances and faculty recruitment and retention were their greatest challenges as a dean. Among these respondents, 98% (N=55) reported being satisfied to very satisfied with their job overall. The survey results will inform ADEA's leadership development programs for the next five to seven years.

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One of the American Dental Education Association (ADEA)'s strategic directions is leadership, defined as the commitment to “provide leadership development for the future of dental education and serve as the authority on the education of the dental and allied dental workforce.” ADEA’s responsibility extends to preparation of emerging leaders in dental education from among students, residents, and fellows. Due to anticipated changes in both higher education and the delivery of health care, leaders will need special skills, knowledge, and attitudes to guide dental education successfully into the future. Published profiles of deans from multiple health professions (dentistry, medicine, veterinary medicine) have assisted in identifying group and individual characteristics associated with effective leadership, related experiences, and career paths to deanships. Describing how to integrate leadership principles into practice and the actual and anticipated challenges faced by current leaders in health professions education informs future needs.

ADEA published its first dental deans’ profile in the Journal of Dental Education in 2000, followed by a second report on the topic in 2004. These profiles have guided curricular development for the ADEA Leadership Institute and other leadership and professional development programs conducted by ADEA. Search committees and job candidates have referenced these profiles for guidance. In the 12 years since ADEA developed the most recent profile, many changes have taken place in dental education, as well as in broader academic and health care environments. The Academy for Academic Leadership (AAL) has conducted extensive research into the competencies associated with successful deanships, resulting in a veterinary college deans’ profile, two reports on dental school deans, and another in optometry. ADEA partnered with AAL in 2014 to develop and administer the most recent ADEA deans’ profile survey. The aims of the survey were threefold: 1) to develop a current profile of deans in U.S. dental schools and Puerto Rico; 2) to document the perceptions of dental school deans about critical issues, challenges, and opportunities that should be addressed through ADEA’s leadership development programs; and 3) to use survey data to inform the competencies, subject matter, and activities embedded in ADEA leadership development initiatives.
The data were placed into .csv file format and were coded and imported into SPSS 22.0 (IBM, Inc., Armonk, NY, USA) for analysis. Descriptive statistics (frequency and percentages) were used to describe general characteristics of the respondents, as well as the responses for each focus area of the survey. For purposes of comparing responses to items addressing job satisfaction, knowledge, and degree of challenge, the response categories, originally in rating scale formats, were combined, thus allowing for statistical chi-square analysis. The select variable categories tested included gender, whether the respondent had served as dean prior to his or her current deanship, past participation in the ADEA Leadership Institute, and number of years served as dean. The responses were collapsed into the following dichotomous categories: minor contribution/major contribution, less important/more important, less prepared/more prepared, and low level challenge/high level challenge. Open-ended, free text response items were consolidated into themes that emerged from the data, and representative quotations are reported anonymously.

**Results**

The deans of all dental schools in the U.S. and Puerto Rico were invited to participate (N=65). A total of 56 deans responded, for a response rate of 86%, with statistical power of 0.80 (p=0.05; d=0.30).

**Characteristics of Respondents**

Demographic information on the respondents is shown in Table 1. Their average age at the time of becoming a dean was 54 years (Mean=53.6 [SD=6], Mode=54, Median=54). Most of the responding deans were male (N=44; 79%) and white/non-Hispanic (N=49; 88%). The majority were between the ages of 46 and 55 (N=31; 55%) when they first became a dean. At the time of the survey, the majority were between the ages of 56 and 65 (N=34; 61%), with a mean age of 61.4 and a range of 48-72. Among the respondents, 25 (45%) had served as dean elsewhere prior to their current appointment. Of those reporting their degrees, 100% (N=54) reported they held a dental degree (DDS/DMD), while 17% (N=9) also held a doctor of philosophy degree (PhD) and 61% (N=33) held a master’s degree in science, the arts, public health, health administration, or business. Two deans held a law degree.
(JD), and one held a medical degree (MD). Overall, 85% (N=46) held a graduate or professional degree in addition to the dental degree. Eleven disciplines were represented among the respondents, with general dentists being the most prevalent (N=21; 39%) followed by periodontics (N=10; 19%). When they became dean, 85% (N=46) were full professors.

**Job Responsibilities and Satisfaction**

A majority (N=37; 67%) of the deans who responded to the survey reported to a provost or equivalent, followed by a vice president or equivalent (N=10; 18%) and president of university (N=8; 15%) (Table 2). Based on their average workload, the respondents reported that a majority of their responsibilities (reported as Mean [M] and Standard Error of Mean [SEM]) revolved around school administration/management (M=52%, SEM=2.0), with fundraising second (M=15%; SEM=1.3) followed by university service (committees, etc.) (M=10%; SEM=0.8). When asked for the average number of hours they worked per week, the majority reported over 50 hours: 18 (32%) reported 50-59 hours, and 28 (50%) reported 60-69 hours, with a mean of around 60 hours.

The respondents were asked to rate the contribution specified areas of responsibility made to their job satisfaction. Students (N=45; 80%), the academic environment (N=36; 64%), leadership development (N=35; 63%), and faculty (N=31; 55%) were reported as having the highest level of influence on their job satisfaction. The areas of responsibility they reported having less influence on job satisfaction were research (N=11; 20%), fundraising (N=7; 13%), and teaching (N=7; 13%).

Chi-square analyses were conducted to compare differences in the respondents’ perceptions of how specified areas of responsibility contributed to their job satisfaction. The only statistically significant finding was between age at deanship and level of contribution of the staff ($\chi^2=8.2, p=0.04$). Those who were older (≥56 years of age) indicated that staff contribution led to higher job satisfaction, whereas those ≤55 years of age did not feel that staff contribution was a major contributor to their job satisfaction.
When the respondents rated their overall job satisfaction on a scale of 1=very dissatisfied to 5=very satisfied, nearly all (98%; N=55) reported being satisfied to very satisfied. When asked on the same scale about satisfaction with their overall balance in life, including work, family, friends, spirituality, community, and recreation/hobbies, 64% (N=36) indicated they were satisfied to very satisfied, while 11 (20%) indicated that they were dissatisfied to very dissatisfied.

**Importance of Specified Knowledge Areas**

Respondents were asked to indicate the importance of 17 knowledge areas in fulfilling their responsibilities as a dean. A large majority (N=51; 91%) of the respondents selected communication as being most important, followed by conflict resolution (N=44; 79%), finance and budget (N=40; 71%), and leadership development for the administrative team (N=38; 69%). Knowledge about research (N=2; 4%), teaching (N=1; 2%), and clinical dentistry (N=1; 2%) were rated as less important in fulfilling their responsibilities as dean.

Chi-square analysis identified two significant areas influencing the respondents’ perceptions regarding knowledge of the school’s operations and faculty work-life. Among the respondents who had not previously served as a dean prior to their current appointment, 60% (N=28) reported feeling knowledge of the school’s operations was more important than did 40% (N=19) of those who had held a position as dean previously ($\chi^2=4.24$, p=0.04). Five out of 36 of the respondents ≤55 years of age reported feeling that knowledge of faculty work-life was less important when compared to those who were ≥56 years of age ($\chi^2=7.9$, p=0.045).

**Level of Preparedness and Perceived Challenges**

Respondents were asked how well they were prepared in several areas for becoming a dean. The highest levels were reported in the following areas: 38 (68%) reported being prepared in the area of clinical education, 29 (52%) regarding student relations, 28 (50%) regarding curriculum/accreditation, and 21 (36%) regarding interactions with alumni. By contrast, 12 (22%) reported being least prepared for fundraising.

Chi-square analysis identified significant differences between the respondents who had and had not been a dean previous to their current position. The respondents who had previously served as a dean (N=25; 45%) reported perceiving that knowledge of research was less important in fulfilling their role as a dean than those (N=31; 55%) who had not served previously as a dean ($\chi^2=3.34$, p=0.034).

Table 3 shows the respondents’ perceived levels of importance of selected areas associated with job satisfaction, knowledge area, and preparedness to be a successful leader as a dental dean. Financing dental education (N=39; 70%), faculty recruitment and retention (N=27; 48%), and sustaining the dental school’s research mission (N=26; 46%) were

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<th>Table 3. Respondents’ perceived level of importance of selected areas associated with job satisfaction, knowledge area, and preparedness for successful leadership as a dental dean (N=56)</th>
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<tbody>
<tr>
<td><strong>Level of Importance</strong></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>High</strong></td>
</tr>
<tr>
<td>Academic environment</td>
</tr>
<tr>
<td>Leadership development</td>
</tr>
<tr>
<td>Faculty</td>
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<td></td>
</tr>
<tr>
<td><strong>Moderate</strong></td>
</tr>
<tr>
<td>Teaching</td>
</tr>
<tr>
<td>Alumni relations</td>
</tr>
<tr>
<td>Community relations</td>
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<td><strong>Low</strong></td>
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<tr>
<td>Fundraising</td>
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<td>Finance/budget</td>
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perceived by respondents as the greatest challenges for a dean (Table 4). The respondents also rated the impact of selected areas as positively impacting their professional responsibilities as a dean. The top four areas were teaching (N=24; 44%), clinical care and service (N=22; 41%), working in the private sector (N=18; 33%), and research (N=15; 27%).

**Professional Development**

Nearly 75% (N=41) of these deans had participated in an ADEA faculty development program; 15 (27%) were graduates of the ADEA Leadership Institute; and 35 (63%) reported that they had participated in the ADEA New Deans’ Workshop. The respondents were also asked to comment on perceived challenges, helpful books/resources they used in preparing for their deanship, and advice they would give to future deans. Table 5 provides examples of those responses organized by theme.

Finally, 41 respondents (75%) indicated that they had participated in courses, classes, programs, and other formal leadership development activities beyond ADEA programs, and 34 (64%) reported feeling there was a need for more formal training beyond what currently exists through the ADEA Council of Deans.

**Discussion**

**Current Profile**

According to this study, the typical dental dean is white, non-Hispanic, male, between the ages of 56 and 65. While this profile is relatively consistent with the 2002 report, the number of women deans has more than doubled, from six in 2002 to 14 in 2014. In the past two years, 28 new deans have been appointed (in 43% of 65 dental schools), of which ten are women. Regarding the 2014 deans’ educational background, all of the respondents (100%) held a dental degree (DDS/DMD), and a majority (N=46; 85%) held a graduate or professional degree as well. Similar to deans in 2002, the majority of the deans in 2014 were credentialed as general dentists.

There were more similarities than differences between the cohorts surveyed in 2002 and 2014, but there was a shift in the lines of authority in 2014. In 2002, only 40% of the responding deans reported to a provost or equivalent, while in 2014 that percentage increased to 67%. For the 2014 deans, the average number of hours worked per week was around 60 (Mean=59.7 [SD=7], Mode=60, Median=60), higher than in 2002 when the average was 56.6 hours. Similar to 2002, administration and management responsibilities demanded the majority of the 2014 respondents’ time, followed by fundraising.

Almost all respondents in this study rated their overall job satisfaction as satisfactory to very satisfactory. Further, a majority of the respondents were satisfied with their overall work-life balance. However, nearly 20% (N=11) indicated that they were dissatisfied to highly dissatisfied with their life balance. Other studies in academia and elsewhere have found that those in managerial positions were happier or more satisfied in a wide spectrum of other areas, ranging from family life to job satisfaction.

In both 2002 and 2014, the three items that contributed most highly to the deans’ job satisfaction were perceived by respondents as the greatest challenges for a dean (Table 4). The respondents also rated the impact of selected areas as positively impacting their professional responsibilities as a dean. The top four areas were teaching (N=24; 44%), clinical care and service (N=22; 41%), working in the private sector (N=18; 33%), and research (N=15; 27%).

**Table 4. Deans’ top five areas with high level of challenge and impact of selected areas on their professional responsibilities, by number and percentage of total respondents (N=56)**

<table>
<thead>
<tr>
<th>Area of Challenge</th>
<th>High Level of Challenge</th>
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<tbody>
<tr>
<td></td>
<td>Number (Percentage)</td>
</tr>
<tr>
<td>Financing dental education</td>
<td>39 (69.6%)</td>
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<tr>
<td>Faculty recruitment and retention</td>
<td>27 (48.2%)</td>
</tr>
<tr>
<td>Sustaining the dental school’s research mission</td>
<td>26 (46.4%)</td>
</tr>
<tr>
<td>Access to oral health care</td>
<td>17 (30.4%)</td>
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<tr>
<td>Collaboration with other health professions</td>
<td>16 (28.7%)</td>
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**Area of Impact**

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<thead>
<tr>
<th></th>
<th>Negative</th>
<th>Neither Neg./Pos.</th>
<th>Positive</th>
<th>NA</th>
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<tbody>
<tr>
<td>Teaching</td>
<td>16 (29.1%)</td>
<td>14 (25.5%)</td>
<td>24 (43.6%)</td>
<td>1 (1.8%)</td>
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<tr>
<td>Clinical care/service within school</td>
<td>15 (27.8%)</td>
<td>14 (25.9%)</td>
<td>22 (40.7%)</td>
<td>3 (5.6%)</td>
</tr>
<tr>
<td>Work in private sector (consulting, etc.)</td>
<td>12 (21.8%)</td>
<td>20 (36.4%)</td>
<td>18 (32.7%)</td>
<td>5 (9.1%)</td>
</tr>
<tr>
<td>Research</td>
<td>23 (41.8%)</td>
<td>15 (27.3%)</td>
<td>15 (27.3%)</td>
<td>2 (3.6%)</td>
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**Note:** Top part of table ordered from higher to lower; bottom part of table ordered by positive impact.
students and faculty, academic environment, and leadership development.

**Leadership Development Initiatives**

The top six knowledge areas the deans reported as being most important for their jobs were communication, conflict resolution, finance/budget, leadership development, negotiations, and public relations. These perceptions were similar to those reported by deans in 2002, with the exception of conflict resolution and negotiation, which were not among the top areas reported. The role of a dental dean is multifaceted and challenging, sometimes making it difficult to determine the requisite skills necessary for success. Additionally, the length of time a dean has served in that capacity may influence his or her perceptions. New administrators/deans will generally need more formal training and mentorship than deans who have been in their positions longer. Over time, deans’ duties have evolved to include a variety of roles, from budgeting, to fundraising, to personnel management, to program oversight. The vast array of a dean’s ever-changing responsibilities require

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<th>Table 5. Representative responses to open questions, organized by theme</th>
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<tr>
<td><strong>Theme</strong></td>
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</table>
| **Formal Leadership and Other Education** | • National conferences  
• Internal leadership development [i.e., within school or university]  
• ELAM  
• Personal leadership coach  
• Further education (e.g., Master’s, PhD, MPH)  
• ADEA CCI Liaison training  
• ADEA Signature Series  
• Deans Institute  
• CASE & ASTHO leadership development programs  
• Wharton and Kellogg Leadership Institutes  
• HRSA Fellowships |
| **Perceived Challenges** | • Ability to engage alumni  
• Faculty and staff management issues (e.g., managing conflicts, recruitment and retention, workload, faculty development, aging faculty, morale issues)  
• Time management  
• Balancing work and life  
• Budget and fundraising (e.g., sustainability with declining state funding, financial viability of dental clinic and faculty practice, growing costs associated with dental education and research)  
• Patient care and curriculum change  
• Physical plant (e.g., not sufficient space for clinic expansion, research, classrooms)  
• Accreditation |
| **Useful Resources** | • Leadership reading (e.g., Stephen Covey, Span of Control philosophy, Sun Tzu’s *The Art of War*, Machiavelli’s *The Prince*, Ronald Heifetz’s *Leadership on the Line*)  
• Good mentor and colleagues  
• ADEA Deans’ Briefing Book  
• *Chronicle of Higher Education*  
• Financial or business management textbooks (e.g., Larry Goldstein’s *Guide to College and University Budgeting: Foundations for Institutional Effectiveness*) |
| **Advice for Future Deans** | • Understanding of budgets and fiscal issues  
• Communication skills  
• Work-life balance  
• Be humble, stay flexible, innovative, accessible, and accountable  
• Understanding of stakeholders  
• Importance of good mentorship  
• Surround yourself with competent key team  
• Focus on leadership rather than management  
• Have to love what you do |
a comprehensive and tailored skill set, including expert skills in problem-solving and organizational management. Being able to change as the institution evolves necessitates lifelong learning with a sense of environmental dynamics. While knowledge of such areas as academics, accreditation requirements, and curriculum management are important aspects of dental education and leadership, key areas that continue to be identified as essential to a dean’s satisfaction and success are communication skills, conflict resolution/negotiation skills, and leadership development. In addition, advanced training in financial management, budgeting, and fundraising appeared to be a consistent message.

One of the interesting findings of the survey is that the responding deans considered knowledge of research as the least important area of knowledge in their position, although 46% (N=26) identified sustaining the school’s research mission as a high level challenge. The 2002 survey, which also included the review of job announcements for deanships, found that research achievement was important to securing a job as a dean, but deans rated research low as a factor in performing the job. The low rating in 2014 of research knowledge does not result in a clear conclusion. With funding opportunities becoming more competitive and multidisciplinary, along with university expectations for research productivity, one implication is that strategies for building research initiatives should be a high priority when developing future leadership initiatives.

Critical Issues, Challenges, and Opportunities

Areas that these deans reported as major challenges were similar to areas they have elsewhere identified as being the least prepared to address (finance, budgeting, communication, fundraising, and faculty/staff morale). In this study, the responding deans reported feeling least prepared in the areas of fundraising, research, and transition planning. These areas were confounded with challenges in financing dental education and faculty recruitment and retention. These continued challenges should be addressed when considering initiatives in future leadership development. Emphasis in training and mentoring of future deans to ensure the adoption and adaptation of skill sets will be needed to meet the demands of a changing dental education environment.

Limitations

While survey research has proven to be an acceptable method for collecting large amounts of disparate data, measurements must be reliable and valid to provide confidence in generalizability beyond the sample studied. Survey research best practices should always be followed to ensure high-quality data with real value. Survey research produces data based on observational data that encompass a wider breadth of people than do other types of research. This allows for a more inclusive representative sample from which to generalize the results. However, because these studies provide a snapshot of a specific point in time, there is no indication of any sequence of events. Even with the use of a valid and reliable instrument, respondents can choose not to respond to specific items accounting for missing data and/or interpret questions differently than others. Attention when generalizing these study results to other populations and settings is warranted.

Conclusion

The findings of this study are similar to those from previous studies and acknowledge changes in the development of leadership initiatives that focus on current issues and challenges. Challenges that have been consistent over the past decade require more immediate and targeted attention in ADEA’s leadership development efforts for the next five to seven years. These areas include fundraising, finance/budgeting, communication, negotiation, and conflict management skills. Skills in building research initiatives should also be explored in leadership curricula. This survey, along with previous surveys, produces a 360 degree view for those aspiring to become a dental school dean. The findings should also prove useful to search committees and others who seek to define the competencies and experiences required for successful leadership as a dental school dean.

REFERENCES