Leadership in Dental Hygiene Degree Completion Programs: A Pilot Study Comparing Stand-Alone Leadership Courses and Leadership-Infused Curricula

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Abstract: The aim of this study was to define the extent to which leadership and leadership skills are taught in dental hygiene degree completion programs by comparing stand-alone leadership courses/hybrid programs with programs that infuse leadership skills throughout the curricula. The study involved a mixed-methods approach using qualitative and quantitative data. Semi-structured interviews were conducted with program directors and faculty members who teach a stand-alone leadership course, a hybrid program, or leadership-infused courses in these programs. A quantitative comparison of course syllabi determined differences in the extent of leadership content and experiences between stand-alone leadership courses and leadership-infused curricula. Of the 53 U.S. dental hygiene programs that offer degree completion programs, 49 met the inclusion criteria, and 19 programs provided course syllabi. Of the program directors and faculty members who teach a stand-alone leadership course or leadership-infused curriculum, 16 participated in the interview portion of the study. The results suggested that competencies related to leadership were not clearly defined or measurable in current teaching. Reported barriers to incorporating a stand-alone leadership course included overcrowded curricula, limited qualified faculty, and lack of resources. The findings of this study provide a synopsis of leadership content and gaps in leadership education for degree completion programs. Suggested changes included defining a need for leadership competencies and providing additional resources to educators such as courses provided by the American Dental Education Association and the American Dental Hygienists’ Association.

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The oral health care needs of the public have become increasingly complex, requiring change in the depth and breadth of education, scope, and mode of delivery of comprehensive dental hygiene care. At the same time, millions of people go without oral health care due to living in remote areas with no dentist available or where dentists do not accept Medicaid.1 Dental hygienists possess the clinical skills to address the needs of the public, but most lack leadership skills and advanced training to assist with the access to care issue. Planned leadership education is required to meet the complex and changing needs of the public and to provide dental hygiene graduates with the leadership skills needed to more effectively advocate for patients and boldly advance the local and national interests of the profession.

Leadership skills are necessary in many facets of the dental hygiene profession including patient care, research, education, public health, and regulatory and governmental affairs.2 As a result, the American Dental Hygienists’ Association (ADHA) created the National Dental Hygiene Research Agenda, which is comprised of five areas of study relating to the dental hygiene profession: health promotion and disease prevention, health services research, professional education and development, clinical dental hygiene care, and occupational health and safety.3 The AHDA posited that integrating a measure of
leadership training in degree completion programs will raise the leadership mindset and capacity of the rising generation. Over time, these graduates will more effectively advance the profession’s interests in health promotion and disease prevention, health services research, and professional education and development.  

Stand-alone leadership training courses offer dental hygiene students a new educational opportunity to expand their knowledge in the areas of cultural competence and practice management. Unfortunately, the provision of leadership-related courses in dental hygiene education is limited. With the majority of dental hygiene entry-level programs offered at the associate degree level, leadership skills are not likely to be incorporated into an overcrowded, rigorous curriculum. Leadership is not listed in any category or subcategory of the content areas mandated by the Commission on Dental Accreditation (CODA), which specifies the standards by which dental hygiene education programs are accredited. Entry-level programs, such as associate or baccalaureate programs, focus on traditional clinical dental hygiene practice, whereas the goal of degree completion programs is to prepare dental hygienists for advanced career roles in addition to traditional clinical dental hygiene practice. A study by Portillo et al. reported that only 31% of degree completion programs surveyed offered a stand-alone leadership course in the core curriculum and that little was known about the content or delivery of leadership-related curricula in those programs. Interestingly, another study discovered that the majority of students viewed leadership as part of their profession and would willingly participate in leadership training programs in their teaching institutions.

With the increase in the complex nature and changing needs of the public, the ADHA partnered with the American Dental Education Association (ADEA) and the Academy for Academic Leadership (AAL) to form a pilot group of dental hygiene programs to facilitate the development of new curricular and program domains. The pilot programs were selected by program type and location and focused on the changes to dental hygiene curricula related to future dental hygiene practice, the dental workforce, and overall patient care. New domains were defined for the transformed entry-level dental hygiene program to include foundational knowledge, customized patient-centered care, management in health care systems, interpersonal communication and interprofessional collaboration, critical thinking, and professionalism. A common element connecting each of these new domains is leadership. These new domains will require that dental hygiene students be educated in leadership concepts that lead to the development of effective leadership skills and opportunities to apply these skills.

Without some form of leadership development, the dental hygiene profession will remain stagnant, and the current and evolving needs of the public will remain unmet. The aim of this study was to define the extent to which leadership is taught in degree completion programs by comparing stand-alone leadership courses with programs that infuse leadership skills throughout the curricula.

### Methods

Idaho State University Human Subjects Committee approval (#4146) was obtained to conduct this study. The research design used was a mixed-methods approach using both quantitative and qualitative methods.

The names of all accredited dental hygiene degree completion programs and their directors were acquired from the ADHA website. An initial email was sent to program directors of all 53 degree completion programs to determine whether their programs offered leadership as a stand-alone leadership course, infused leadership education throughout the curriculum, or did not offer any leadership training. Program directors who responded provided contact information for faculty members who teach courses pertaining to leadership. With these responses in hand, emails were sent to program directors and faculty members requesting their course syllabi along with an invitation to participate in the qualitative (interview) portion of the study. Figure 1 shows the study design.

In the quantitative portion of the study, we used descriptive statistics to evaluate the course syllabi using a self-designed matrix created to measure and compare skill sets taught in stand-alone leadership courses and leadership-infused curricula. Table 1 shows this matrix based on the leadership skills described in Ledlow and Coppola’s *Leadership for Health Care Professionals: Theories, Skills, and Applications*. Taichman et al. argued that competencies for dental and dental hygiene leadership courses should include communication skills, the ability for self-reflection, critical thinking and problem-solving skills, professionalism, ethics, and social responsi-
Initial email sent to program directors of all 53 degree completion programs to determine whether their programs offered leadership as a stand-alone leadership course or infused throughout the curriculum.

Program directors responded and provided contact information for faculty members who taught courses pertaining to leadership.

Follow-up emails were sent to program directors and faculty members requesting course syllabi along with an invitation to participate in the interview portion of the study.

A purposive sample of program directors and faculty members who taught either a stand-alone leadership course or leadership-infused in the dental hygiene degree completion curricula were interviewed via telephone for approximately 30 minutes each.

Analysis of interviews was performed using lists of prepared questions and participants’ perceptions of leadership skills taught in their programs.

Figure 1. Flow chart of study design
However, we chose to use the Ledlow and Coppola text as the basis for our framework because of its reliability, transferability, authenticity, and validity and because it is recognized in qualitative research as sound and appropriate. 11,13

Semi-structured interviews of a purposive sample of program directors and faculty members who taught either a stand-alone leadership course or leadership-infused courses in degree completion curricula were conducted for the qualitative portion of this study. In qualitative research, a sample size of five to six interviews per program type was recommended by a qualified statistician because saturation was expected to be reached with that number. Interviews were conducted via telephone and lasted for approximately 30 minutes each, were audiorecorded, and were transcribed by the principal investigator. Variables to be studied included the position title of the interviewees (program director or faculty member), perceptions with regard to their respective course or curricula, skills taught in stand-alone leadership courses and leadership-infused curricula, course syllabi, and leadership skill sets as defined by Ledlow and Coppola. 13 Inclusion criteria for the participants were that the program must have been in operation for at least three years, be housed in an accredited U.S. academic institution, and be included on the ADHA list of degree completion programs. Analysis of interviews was performed using Thomas’s inductive method. Interpretation of data utilized a descriptive narrative of common themes representing participants’ perceptions. Table 2 shows the questions used for the interviews. Patterns and themes were identified and categorized using Thomas’s inductive method. Interpretation of data utilized a descriptive narrative of common themes representing participants’ perceptions. Table 1. Course syllabi assessment template used in study, with examples of three courses

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Measurement of Leadership Skills</th>
<th>Course or Program Competencies</th>
<th>Leadership Project</th>
<th>Communication (Oral and Written)</th>
<th>Professional Development</th>
<th>Emotional Intelligence</th>
<th>Integrity</th>
<th>Advocacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership in Self and Society</td>
<td>Yes</td>
<td>No</td>
<td>Group assignments, written assignments</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Not clearly defined</td>
</tr>
<tr>
<td>Advanced Community Oral Health</td>
<td>Participation, written assignments, quiz, final written project, PowerPoint presentations</td>
<td>No</td>
<td>Written assignments, PowerPoint presentation</td>
<td>Social responsibility</td>
<td>Critical thinking, problem solving, evidence-based decision making</td>
<td>–</td>
<td>Workforce models</td>
<td></td>
</tr>
<tr>
<td>Management Communications</td>
<td>Exams, writing assignments, team projects and presentations, individual oral presentations, participation</td>
<td>No</td>
<td>Communication, communication process, strategic communication, written assignments, presentations, team communication, interpersonal skills, conflict resolution, collaboration, negotiation skills</td>
<td>Professional competence</td>
<td>Critical thinking, problem solving, project management, evidence-based decision making</td>
<td>–</td>
<td>One unit in internal communication unit: advocating for change</td>
<td></td>
</tr>
</tbody>
</table>

Results

Of the 53 degree completion programs, 49 (92%) participated in the inclusion criteria, and 45 of those (22%) reported their institution offered a leadership-infused curriculum. Six (12%) responded their institution offered both a stand-alone leadership course and leadership-infused curriculum. Tables 2 and 3 show the questions used for the interviews. Patterns and themes were identified and categorized using Thomas’s inductive method. Interpretation of data utilized a descriptive narrative of common themes representing participants’ perceptions.

Table 2 shows the questions used for the interviews. Patterns and themes were identified and categorized using Thomas’s inductive method. Interpretation of data utilized a descriptive narrative of common themes representing participants’ perceptions.
Six interviewees (12%) reported their institution offered a stand-along leadership course. When contacted, these individuals did not state whether their program also offered leadership content and experiences throughout the program; therefore, it is unknown if these programs were actually hybrid programs. Five of the six program directors of the stand-alone courses provided course syllabi. Among the program directors, 13 (27%) responded their institution did not offer a stand-alone leadership course or leadership-infused curriculum, and four (8%) did not respond.

Table 2. Interview questions used with program directors/faculty members

Questions for Program Directors/Faculty Members Teaching in Leadership-Infused Curricula

1. What year did your degree completion program begin?
2. What does your institution define as “leadership-infused”?
3. How long has this leadership-infused curriculum been offered at your institution: since the inception of the program or after the program had been around for years?
4. What courses in your program infuse leadership within the content?
5. What leadership skills are taught in these courses?
6. How is leadership incorporated into your curriculum?
7. How do you measure competence in leadership skills taught in your program?
8. Does your program require a leadership project? If so, describe the leadership project students must complete. What is the specific objective of this project?
9. Does your program offer a stand-alone leadership course in the leadership-infused curriculum?
   • If so, what is the name of the course?
   • If not, why does your program not offer a stand-alone course?
10. What barriers exist regarding the incorporation of a stand-alone leadership course?
11. What changes do you think would be beneficial to your program’s curriculum to better prepare graduates for roles in leadership?
12. Do you think your program’s leadership-infused curriculum prepares graduates for leadership roles in the dental hygiene profession? Why or Why not?
13. Based on your experience, what can be done to enhance leadership skills taught in dental hygiene degree completion programs?
14. Does your program offer exit surveys or interviews?
15. Do you know of leadership roles that students have achieved since graduating?

Questions for Program Directors/Faculty Members Teaching a Stand-Alone Leadership Course

1. What year did your degree completion program begin?
2. What is the title of the leadership course that you teach/offer?
3. How long has this course been offered at your institution: since the inception of the program or after the program had been around for years?
4. Why was the stand-alone leadership course added to your program?
5. What leadership skills are taught in this course?
6. Do you have a required text for this course? If so, what is the title(s) of the required text?
7. How is leadership incorporated into your curriculum?
8. How do you measure competence in the leadership skills taught in your course?
9. Does your course require a leadership project? If so, describe the leadership project students must complete. What is the specific objective of this project?
10. Are leadership skills taught in other courses in your program’s degree completion program?
   • If so, which courses?
   • If not, why do you think leadership skills are not being taught in these courses?
11. How does your program’s stand-alone course prepare graduates for leadership roles in the dental hygiene profession?
12. Do you believe a stand-alone leadership course is enough to prepare dental hygiene graduates for leadership roles? Why or why not?
13. What barriers exist regarding the infusion of leadership concepts throughout your program’s curriculum?
14. What changes do you think would be beneficial to your program’s curriculum to better prepare graduates for roles in leadership?
15. Based on your experience, what can be done to enhance leadership skills taught in dental hygiene degree completion programs?
16. Does your program offer exit surveys or interviews?
17. Do you know of leadership roles that students have achieved since graduating?
Course Syllabi Analysis

Of the participating programs, a total of 16 (33%) provided course syllabi for analysis. Six program directors provided course syllabi for leadership-infused programs (38%), and five each provided course syllabi for hybrid programs (31%) and stand-alone leadership courses (31%). Table 1 provides a sample of data collected from three of the course syllabi. Table 3 lists the courses and concepts that were considered as having leadership content and experiences by program type.

Figure 2 shows the numbers of programs with various characteristics. Two of the six (33%) leadership-infused programs had formal competencies related to leadership. Two of the five (40%) hybrid programs had formal leadership competencies, and four of the five (80%) programs offering a stand-alone leadership course identified formal competencies. It is notable that four of the six (67%) leadership-infused programs, three of the five (60%) hybrid programs, and one (20%) of the stand-alone leadership courses did not have formal competencies related to leadership.

These leadership-infused curricula, hybrid programs, and stand-alone courses assessed students’ leadership skills with written assignments/self-reflection, quizzes, oral presentations, and examinations. At least one course in each of the hybrid programs required a leadership project, such as a presentation on leadership at the national, state, or community level or an interview with a person in leadership. Three of the five (60%) stand-alone leadership courses required a leadership project and a leadership textbook. None of the leadership-infused programs required or recommended a leadership text for any of

<table>
<thead>
<tr>
<th>Table 3. Course titles and topics in course syllabi (N=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership-Infused</strong></td>
</tr>
<tr>
<td>Practice Management and Communications</td>
</tr>
<tr>
<td>Current Concepts for Dental Hygiene Practice</td>
</tr>
<tr>
<td>Community and Health Education</td>
</tr>
<tr>
<td>Teaching Strategies</td>
</tr>
<tr>
<td>Issues in Dental Hygiene Research (topic)</td>
</tr>
<tr>
<td>Professional Development (topic)</td>
</tr>
</tbody>
</table>

Figure 2. Aspects of leadership content in programs in each type, determined by assessment of course syllabi (N=16)
members of leadership-infused programs, and one interview was conducted with a faculty member who taught a stand-alone leadership course. Efforts were made to identify the extent of leadership taught in the programs that offered stand-alone leadership courses, but most directors/instructors did not respond or did not consent to an interview. Table 4 shows the interviewees’ position title, level of education, and number of years teaching leadership courses. Most had advanced degrees, were female, and had an average of six to ten years’ leadership teaching experience.

Common themes that became evident when synthesizing the content of the interviews were the participants’ perceptions regarding inadequate measurement of competence in leadership skills, barriers to incorporating a stand-alone leadership course into curricula, beneficial changes to existing curricula, enhancements for the future of programs, and how well leadership-infused curricula and hybrid program curricula prepared graduates for roles in leadership.

Of the program directors and faculty members who taught in a leadership-infused curriculum, seven interviewees stated that their programs did not have formal competencies related to leadership, and three stated that their programs inadequately measured leadership competence. One program director of a leadership-infused program stated, “I’m not sure we measure leadership competence. It is difficult to tangibly measure.” A program director of a hybrid program responded, “This is a difficult question to answer, other than in discussions and course modules to assess competence.”

The results of the interviews suggested that barriers to incorporating a stand-alone leadership course into an existing leadership-infused curriculum were the lack of qualified educators to teach the course, the number of credits in a given curriculum, and the availability of faculty to teach due to work overload. “The curriculum process—if we put something in, we have to take something out. What do you take out? There are a limited number of hours that must

### Qualitative Analysis

Sixteen program directors or faculty members who taught either a stand-alone leadership course or in a leadership-infused curriculum participated in the interview portion of this study. Of these 16, six interviews were conducted with program directors or faculty members of hybrid programs, nine interviews were conducted with program directors or faculty members of leadership-infused programs, and one interview was conducted with a faculty member who taught a stand-alone leadership course. Efforts were made to identify the extent of leadership taught in the programs that offered stand-alone leadership courses, but most directors/instructors did not respond or did not consent to an interview. Table 4 shows the interviewees’ position title, level of education, and number of years teaching leadership courses. Most had advanced degrees, were female, and had an average of six to ten years’ leadership teaching experience.

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### Table 4. Selected characteristics of interviewees (N=16), by program type

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Stand-Alone</th>
<th>Hybrid</th>
<th>Leadership-Infused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position title</td>
<td>1 faculty member</td>
<td>3 program directors, 4 faculty members</td>
<td>7 program directors, 1 faculty member</td>
</tr>
<tr>
<td>Level of education</td>
<td>1 PhD</td>
<td>5 PhD, 1 MA/MS, 1 BA/BS</td>
<td>3 PhD, 5 MA/MS</td>
</tr>
<tr>
<td>Number of years teaching</td>
<td>1 for &gt;10 years</td>
<td>1 for 1-5 years, 3 for 6-10 years, 2 for &gt;10 years, 1 did not teach the course</td>
<td>1 for 1-5 years, 4 for 6-10 years, 3 for &gt;10 years</td>
</tr>
</tbody>
</table>

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be followed and it may not be approved,” noted one program director of a leadership-infused program. A faculty member stated, “We do not have qualified educators [leadership certification or training] to teach a leadership-specific course. Something [course] would have to be eliminated from the program to incorporate leadership; our degree completion program needs to mirror the entry-level program.”

The interviewees offered suggestions for beneficial changes to their existing curricula such as adding a stand-alone leadership course, a communications course (to encourage leadership, conflict management, how to influence people), or a management course. Other changes suggested included curriculum reviews and an emphasis area on leadership, similar to the education or public health emphasis many degree completion programs offer. “A leadership focus would be a great marketing tool for enrolling future students,” suggested one faculty member who taught an advanced practice management course.

Suggestions made by the interviewees for enhancements for the future of degree completion programs included incorporating an internship or practicum, a certification in leadership, creating equality among degree completion programs by development of competencies for these programs, and including leadership in the CODA standards for entry-level programs. “There isn’t much equality in degree completion programs. Stand-alone leadership courses are not offered in every program. Competencies for degree completion programs that have a concentration on leadership skills would help,” stated one faculty member in a hybrid program. A faculty member in a leadership-infused program echoed that point, noting that “leadership needs to be required by CODA standards, part of entry-level, so that it can be mirrored in degree completion programs.” A non-dental hygiene faculty member suggested, “Don’t put off leadership to master’s level students; leadership needs to be earlier in the students’ education.”

All interviewees were asked if they thought a stand-alone leadership course adequately prepared degree completion students for roles in leadership. As a follow-up question, they were asked if their program prepared graduates for roles in leadership. All interviewees responded that while stand-alone leadership courses are beneficial, they are foundational, and the skills taught in stand-alone leadership courses must be built upon throughout the curriculum. Three of the interviewees in leadership-infused programs reported feeling their programs prepared graduates for leadership roles but that their programs could offer more leadership opportunities. All interviewees in the hybrid programs agreed that a stand-alone course in addition to leadership-infused throughout the curriculum adequately prepared graduates for leadership roles. A faculty member in a stand-alone leadership course added, “Leadership requires more long-term opportunities, but a stand-alone course gives them the foundational skill sets.”

Discussion

This study built on the research by Portillo et al. regarding leadership education in dental hygiene degree completion programs. The findings of our study were that leadership education is taught in some but not all degree completion programs. Results from this study affirm the lack of leadership development that generally occurs in these programs and add to the body of knowledge regarding the need for additional leadership skills in leadership-infused curricula and stand-alone leadership courses.

Six of the 20 leadership-infused programs offered course syllabi for the study. Some of those programs provided only one or two course syllabi with leadership content, while other program directors provided all course syllabi for their programs. However, the reported number of both hybrid programs and stand-alone courses was six, with five program directors providing course syllabi. Not all programs had competencies in leadership consistent with the leadership skills defined by Ledlow and Coppola (Figure 2). Leadership skills such as communication, self-reflection, critical thinking, problem-solving, professionalism, ethics, and social responsibilities are among the characteristics needed for broadening the dental hygienist’s role in the health care workforce. Leadership skills dovetail into interprofessional education and collaboration, especially with regard to the new proposed domains created by the ADHA/AAL pilot group. Interprofessional collaborative practice incorporates competency domains such as values/ethics for interprofessional practice, roles/responsibilities, interprofessional communication, and teamwork, which are similar to those outlined by Ledlow and Coppola. These leadership skills may be considered traditional by some; however, the Ledlow and Coppola text, course syllabi, and interviews validated the leadership skills taught in these programs.

Although a stand-alone leadership course may provide degree completion students with founda-
tional leadership knowledge, these principles must be integrated throughout the curricula, and programs must provide opportunities for students to apply these skills. With the majority of these programs offered in a distance learning format, a strong focus on communication and emotional intelligence skills was evident. In leadership-infused curricula, professional development, advocacy, and integrity were lacking in several programs. Concepts such as lifelong learning, social responsibility, ethics and trustworthiness, and advancing the profession should be added to institutional competencies to ensure these skills are being addressed.

Hybrid programs incorporated all aspects of leadership in their curricula. While Figure 2 shows the competencies and leadership skill sets for these programs, the hybrid programs offered at least one course in several areas that was difficult to present in a graph, so this report may not give a complete account of what is truly offered in these programs. Professional development, integrity, and advocacy were integrated throughout these curricula. We recognize flexibility or deviation from the traditional leadership skills and/or approaches can help advance the profession of dental hygiene and believe there are different styles of leadership. They do not all need to be alike, but there are basic skills most great leaders possess or practice. The interviews conducted allowed participants to expand on the topics related to leadership. Originally, five to six interviews were to be conducted by program type; however, because leadership was delivered in different ways, we increased the number to incorporate these different teaching modalities.

As seen in the quantitative and qualitative research, a more consistent approach to educating students is necessary to ensure all leadership skills are being taught in degree completion programs. One suggestion is the creation of a leadership model or framework that consists of competencies, similar to those for graduate education created by the ADHA and ADEA, using leadership activities to foster leadership development. To incorporate competencies, programs would need to expand their curricula to include leadership. Similarly, in a study conducted by Gwozdeck et al., a framework for a degree completion program was created based on the ADHA's six focus areas: research, education, licensure and regulation, practice and technology, public health, and government. The result of that study was a collaborative and portfolio-integrated program focused on developing leaders in the profession. Leadership and professional development were the first of the five domains created for this program. Information literacy and communication, health promotion and disease prevention, evidence-based practice, and community were the other domains. Further discussions and development are needed for competencies and/or a leadership model or framework to be created.

This study was not without limitations. One limitation was that only one faculty member who taught a stand-alone leadership course agreed to participate in the interview portion of the study, as compared with five program directors who provided course syllabi for the quantitative portion of the study. The program directors did not state if leadership content was infused throughout their curricula; therefore, it is unknown whether these programs offering stand-alone leadership courses were in fact hybrid programs. With no responses or agreements to participate in the interview portion of the study, this one interview may not be representative of all stand-alone leadership courses. Another limitation was personal bias. The interviewer maintained neutrality and did not offer personal perceptions to influence the respondents in an attempt to minimize bias. With data collected being dependent on the interviewees’ knowledge, interviews were audiorecorded and transcribed, and each interviewee was given the opportunity to review the transcribed notes to ensure accuracy and correct misinformation. Several interviewees corrected the notes and added information they did not think of during the interview.

Conclusion

The dental hygiene profession is at a crossroads. For the profession to advance and meet the growing oral health needs of the public, foundational leadership concepts must be taught and integrated throughout the curriculum, and students must be given the opportunities to practice the application of these skills. Professional development, integrity, communication, problem-solving, self-reflection, and advocacy are among the areas identified in this study as needing further development in degree completion programs. The results suggest that a need exists for consistency in degree completion programs for teaching leadership skills. Formal competencies targeting quality leadership skills would guide educational programs to enhance the promotion of a quality foundation of leadership concepts and skills to prepare dental hygiene graduates to utilize those skills
necessary to serve in leadership roles and promote the profession.

REFERENCES