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Kacy Goetz

*University of New Mexico*

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**DENTAL HYGIENE PROGRAM ADMISSION CRITERIA KEY  
INDICATORS TO NATIONAL BOARD SUCCESS**

by

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**A.A.S, DENTAL HYGIENE, JAMES A. RHODES STATE  
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2017**

THESIS

Submitted in Partial Fulfillment of the  
Requirements for the Degree of

**Master of Science  
Dental Hygiene**

The University of New Mexico  
Albuquerque, New Mexico

**July 2024**

## DEDICATION

To my family,

To my husband, Shawn, your unwavering support, love, and patience have been my rock. Your belief in me kept me going even when things got tough. To my two amazing children, your smiles and hugs gave me the strength to keep pushing forward. You are my inspiration and my greatest joy. Thank you for always being there.

To my mom,

You have always inspired me to continue my education. Your perseverance and dedication have shown me the value of lifelong learning. I strive to make you proud every day.

With gratitude,

Kacy

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To my committee members, Christine Nathe and Justine Ponce, thank you for your time, expertise, and thoughtful contributions. Your support and constructive criticism have been crucial in helping me refine and improve my work. I am truly grateful for all your help and dedication in making this thesis possible.

To my co-workers,

Justin, I couldn't have asked for a better partner through this process. Your encouragement to get started was the push I needed. Jill and Angeline, your dedication to the profession is inspiring. Thank you all for being so supportive.

With sincere appreciation,

Kacy Goetz

# **DENTAL HYGIENE PROGRAMS ADMISSION CRITERIA AS KEY INDICATORS TO NATIONAL BOARD SUCCESS**

**by**

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## **ABSTRACT**

The study evaluates the admission criteria of entry-level dental hygiene programs in the United States and their relationship to National Dental Hygiene Board Examination (NDHBE) success rates. An online survey was distributed to 327 programs, gathering data on admission criteria and NDHBE outcomes through a 16-question Microsoft Forms survey. With a response rate of 16% (53 respondents), the survey found that GPA was the most common admission criterion used by 92% of programs. The results indicated a strong negative correlation between high school GPA and NDHBE success. The study also evaluated NDHBE pass rates with board review courses taken. The study also revealed that graduates from 2021 and 2022 had a negative correlation between board review courses and student's success rate on the NDBHE. Further research with a larger sample size is recommended to explore the impact of non-cognitive criteria on student success.

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## **Chapter I: Introduction**

### **Introduction**

According to the American Dental Education Association (ADEA), 327 entry-level dental hygiene programs are currently in the United States.<sup>1</sup> These programs prepare students to enter the dental hygiene profession competently and to protect the patient's health. Admission to dental hygiene programs is a critical step in the educational pathway of aspiring dental hygienists. These programs must carefully select candidates who have the potential to excel academically and possess the qualities necessary for success in the profession.<sup>2</sup> The success of dental hygiene students, as demonstrated by their performance on licensing board examinations, indicates program quality and effectiveness.<sup>3</sup>

Dental hygiene programs strongly emphasize comprehensive education and thorough preparation for board examinations, such as the National Board Dental Hygiene Examination (NBDHE). The dental hygiene programs offer practical clinical exposure and an academic foundation to help students excel in their board exams. Students engage in coursework that prepares them for the NBDHE by aligning curricula with Commission on Dental Accreditation (CODA) standards, offering board exam preparation courses, and providing academic and emotional support.<sup>4</sup> Tracking pass rates and adjusting course content are standard practices amongst educators to improve student success.

This thesis seeks to explore and analyze the admission criteria used by dental hygiene programs across the United States and compare them to the success of their students on the NBDHE. Ultimately, this research will contribute

to the ongoing discussion on how dental hygiene programs can select candidates more likely to excel academically and become competent dental hygienists.

### **Statement of the Problem**

How do the admission criteria of dental hygiene programs in the United States correlate with the success of their students on the NBDHE?

### **Significance of the Problem**

Dental hygiene education molds the future of the profession. The admission criteria for dental hygiene programs play a critical role in identifying qualified candidates to enter the program and are likely to succeed on their national board exams.<sup>5,6</sup> Admission criteria for dental hygiene programs are multifaceted and vary across institutions.<sup>7</sup> These criteria include academic prerequisites, ACT scores, and more. The dental hygiene admission criteria serve as a screening process to select candidates who are well-prepared academically and most likely to matriculate through the program.<sup>2</sup> These requirements ensure that admitted students possess the necessary foundation in the sciences, clinical aptitude, communication skills, professionalism, and commitment to the profession. Identifying the key indicators that can be used to slate potential candidates should be considered. Dental hygiene programs must utilize the most effective admission criteria to choose candidates most likely to achieve academic success on the NBDHE.<sup>7</sup> The NBDHE is a comprehensive exam used to assess a candidate's knowledge to provide safe and effective care that is acceptable for licensure.<sup>3,8</sup>

Programs use academic criteria to determine program admission because academic performance is a strong indicator of a student's ability to succeed in the program. The correlation between admission criteria and success on national board examinations holds great significance. Academic criteria provide a standardized measure of a student's qualifications, ensuring that admissions decisions are fair and impartial. Thoroughly examining the admission requirements can assist admission committees in choosing the most competent candidates who are well-equipped to thrive in their academic pursuits and increase the likelihood of student success on the NBDHE.<sup>3</sup> Advanced research on admission criteria for dental hygiene programs is necessary when selecting candidates to ensure admission processes are fair, effective, and aligned to prepare students for success in their academic and professional journeys. If dental hygiene programs want to select students capable of meeting the program's demands and achieving academic success, the admission processes should be established around research.<sup>9</sup>

**Operational Terms:**

**Dental Hygiene Programs-** An accredited program that awards associate or baccalaureate degrees in dental hygiene.

**Registered Dental Hygienist (RDH)-** licensed dental professional who has been through an accredited dental hygiene course of study and passed national and state exams. The hygienist focuses on the prevention and treatment of oral disease.

**Admission Criteria-** a set of standards or tests used to decide whether to allow a student entry to an educational program.

**Attrition-** The number of students who fail, dropout, withdraw, or do not continue their academic career.

**American College Testing (ACT)-** a standardized test used for college admissions in the United States.

**Grade Point Average (GPA)-** an average of grades a student obtains throughout their academic experience.

**Commission on Dental Accreditation (CODA)-** accredits dental and dental-related education programs, including advanced dental education programs and allied dental education programs in the United States.

**National Board Dental Hygiene Examination (NBDHE)-** an exam required by state licensing agencies for those seeking to be licensed dental hygienists in that state.

**American Dental Education Association (ADEA)-** national organization representing academic dentistry.

**Evidence-Based Decision Making (EBDM)-** is a process for making decisions using the best available research evidence and other evidence.

**Joint Commission on National Dental Examinations (JCNDE)-** is the agency responsible for the development and administration of the National Board Dental.

**Admission Test for Dental Hygiene (ATDH)-** admission test for anyone interested in pursuing a career in dental hygiene.

**National Board Dental Examination (NBDE)**- an exam required for dental candidates to be licensed in The United States.

## **Chapter II: Review of the Literature**

### **Introduction**

Dental hygiene program admission refers to the process by which individuals apply for and are granted entry into accredited dental hygiene programs at colleges or universities. These entry level programs are typically offered at an associate or bachelor degree.<sup>1</sup> These programs are aimed to prepare students for careers as dental hygienists. Dental hygiene programs' role in oral healthcare is to educate and prepare dental hygienists to provide preventive and therapeutic services to individuals in the communities.<sup>1</sup> These programs are critical in the healthcare system, promoting oral health and preventing dental diseases.<sup>1</sup> The criteria for entry into these programs are multifaceted and vary across institutions.<sup>9</sup> However, standard entry criteria are typically required for admission to most dental hygiene programs. This literature review aims to provide an overview of the entry criteria used by dental hygiene programs to determine program admission.

Dental hygiene incorporates scientific knowledge and evidence-based research to identify, prevent, and address oral diseases and conditions within the health care system. As an oral healthcare practitioner, a dental hygienist has completed a program accredited by an institution of higher education, is licensed in dental hygiene, and is equipped to provide a range of services for the community. Dental hygienists provide various professional services in education, assessment, research, administration, diagnosis, prevention, and treatment, all aimed at promoting oral health and preventing oral disease.<sup>1</sup>



One of the primary reasons for the importance of admission criteria is to identify candidates who are academically prepared for the rigors of dental hygiene education. The dental hygiene program curriculum typically includes foundations in biology, chemistry, anatomy and physiology prerequisites. By setting academic standards, dental hygiene programs ensure incoming students have a foundation in the sciences and are prepared for the dental hygiene program curriculum.

### **Cognitive Admission Criteria**

Dental hygiene programs generally use cognitive admission criteria established by program review committees as a primary part of the admission process into educational programs. Cognitive criteria include various factors such as academic transcripts, standardized test scores, prerequisite coursework, and other indicators of an applicant's academic capabilities.<sup>1</sup> Admission committees use these criteria to evaluate an applicant's previous academic success.<sup>3,9</sup> Whether evaluating high school grades, reviewing standardized test scores like the ACT, or utilizing specific prerequisite courses, cognitive criteria evaluate a student's academic foundation and intellectual abilities.

Dental hygiene programs are highly competitive and require meeting specific admission criteria, which is a critical to securing program admission. Admission committees are tasked with creating standards for admission criteria most likely to determine students' academic abilities. Selecting students with strong academic skills helps with program attrition rates and is essential for the success of the dental hygiene program.<sup>2</sup> Utilizing selective admission criteria ensures institutions will select the most qualified applicants. However, despite

being necessary for maintaining academic standards cognitive admission criteria are not always reliable predictors of a student's educational success.<sup>10</sup>

### ***Grade Point Average***

As part of the selection criteria for program entry, GPA is commonly used in the admission process for various educational programs, including dental hygiene. Many institutions and programs have minimum GPA requirements for admission. GPA is calculated on a scale and reflects a numerical representation of a student's academic performance at an educational institution.<sup>9,11</sup> In the United States, GPA is commonly calculated on a 4.0 scale, where each letter grade corresponds to a specific point value.<sup>9</sup>

GPA requirements vary among programs and can reflect prospective students' academic preparedness for program entry.<sup>7,9</sup> Program entry requirements can range from 2.0, equivalent to a C average, to 3.5 or above for more competitive programs. Achieving the specified GPA reflects the applicant's ability to handle the program's academic demands.<sup>9</sup>

Upon reviewing the literature, concrete evidence is needed to determine the best predictor of student success on the NBDHE. Some research suggests that the student's GPA after completing their first year may better indicate their success on the NBDHE than their GPA at the time of program entry.<sup>7</sup> Additionally, there is a correlation between success on the NBDHE and a student's graduating GPA.<sup>3</sup> According to DeWald, the most reliable indicators of student success on the NBDHE were the dental hygiene GPA and performance in anatomy, psychology, sociology, and the social studies section of the ACT. Additionally, the

science GPA was found to be a strong predictor of success on the NBDHE compared to the Dental Hygiene Aptitude Test (DHAT) and interview scores.<sup>12</sup>

### ***American College Testing***

The ACT is a standardized test widely used as part of the admission criteria for colleges and universities in the United States.<sup>2,9</sup> ACT requirements for program entry were the most common component of the admission process for many educational programs, mainly undergraduate programs at colleges and universities.<sup>9</sup> The ACT is an assessment of a student's readiness for college-level coursework. The score is based on a scale from 1 to 36, with separate scores for each section: English, Math, Reading, and Science. The composite score is calculated by taking the average of the scores obtained in all four sections.<sup>13</sup>

Thirty-one percent of accredited dental hygiene programs use the ACT as part of the programs selection criteria.<sup>9</sup> Institutions require specific ACT score requirements as part of their admission criteria to ensure applicants possess the academic ability to succeed in the programs. These minimum requirements can vary depending on the program's competitiveness and the school's program of study. Meeting the ACT requirements demonstrates an applicant's academic success but is not a stronger predictor of success on the NBDHE.<sup>3</sup> Several studies have been conducted on the correlation of success on the NBDHE and ACT scores. One study revealed that an ACT score below the national and state average was correlated with failure of pre-requisite courses, while another demonstrated that a specific score on the reading portion of the ACT was correlated with success on the NBDHE.<sup>7</sup> DeWald indicated that while ACT scores

can be a mild to moderate predictor of performance, they do not consistently predict performance on the NBDHE.<sup>12</sup>

### ***Preadmission Test for Dental Hygiene***

Some dental hygiene programs require applicants to take entrance exams like the Admission Test for Dental Hygiene (ATDH) as part of the admission process. The ATDH is a standardized assessment tool similar to what is used in dental schools for admission. Previous research reveals a correlation between the Dental Hygiene Aptitude Test (DHAT) as a positive predictor of success on the NBDHE. Another study showed a positive correlation between the comprehensive reading component of the Dental Admission Test (DAT) and the National Board Dental Examination (NBDE).<sup>9</sup>

The ATDH is a nationally standardized examination introduced in September 2021.<sup>14</sup> It provides a comprehensive overview of an applicant's potential and allows dental hygiene admission committees to ensure incoming students have the academic ability to succeed throughout the program. These assessments measure an applicant's preparedness for the dental hygiene curriculum. They are designed to measure a potential candidate's cognitive skills in areas necessary for success in the dental hygiene program. The ATDH comprises six sections covering Reading Comprehension, Language Usage, Quantitative Reasoning, Perceptual Ability, Biology, and General Chemistry.<sup>14</sup> The ATDH results are fair and objective, highlighting the cognitive skills of incoming students built exclusively for dental hygiene programs and meeting CODA standards.<sup>9,14</sup>

## **Non-cognitive Admission Criteria**

Dental programs will use non-cognitive admission criteria. These include attributes that extend beyond academic achievements, such as personal statements, interviews, letters of recommendation, manual dexterity, and psychomotor skills utilized to evaluate admission.<sup>8,9</sup> These criteria provide insights into applicants' personal qualities, interpersonal skills, motivation, and potential for success in their chosen field.<sup>8</sup>

By evaluating non-cognitive criteria, educational programs select academically prepared individuals with non-academic characteristics that may increase their program success.<sup>15</sup> Success in many fields goes beyond academic knowledge, such as resilience, teamwork, and ethical conduct, which are essential for personal and professional growth.<sup>5</sup>

While letters of recommendation, dexterity tests and other non-cognitive criteria can often be utilized by admission committees, there is currently no evidence to support a correlation between success on the NBDHE.<sup>9</sup>

## ***Recommendation Letters***

Recommendation letters are commonly incorporated into the application process for dental hygiene programs. Letters of recommendation are used by twenty-six percent of accredited dental hygiene programs for the admission process.<sup>9</sup> These letters are typically composed by individuals closely interacting with the applicant, such as teachers, employers, or dental professionals. They highlight aspects of the applicant, including their work ethic, interpersonal skills,

and dedication. These letters are considered to offer insights into an applicant's character.

While these letters can provide valuable insights into a candidate's work ethic, skills, and potential, they are also somewhat subjective and can be influenced by personal biases or relationships. These letters raise concerns about their usefulness and value in the admission process.<sup>11</sup> Research indicates that these letters do not predict academic performance, and there is no literature to validate the use of these letters in admissions.<sup>9,11</sup> Admission committees need to consider alternative methods of evaluation that are more objective and reliable.<sup>11</sup>

### ***Interview***

Interviews are a tool for determining candidates for healthcare program admission.<sup>15</sup> Interviews objectively assess an applicant's communication skills, motivations, and overall personal qualities.<sup>9</sup> Interviews go beyond the quantifiable metrics, highlighting an applicant's capacity for effective communication, problem-solving, and cultural competence.<sup>6</sup> Incorporating interviews into the admission process adds depth and dimension to evaluating applicants.

Using a combination of admission criteria ensures that institutions are better equipped to identify academically proficient candidates who have attributes necessary for the profession.<sup>9,12</sup> However, the use of interviews as part of the admission process has conflicting literature regarding its effectiveness. Some studies suggest that non-academic characteristics can be beneficial, while others indicate that they are not significant in predicting program success.<sup>7,15</sup>

### ***Field Experience***

Previous experience can be considered a criterion for admission in healthcare programs like dental hygiene. Hands-on experience in the field, whether as a dental assistant or in a healthcare capacity, indicates an understanding of the profession and dedication to the field.<sup>6,11</sup> This practical experience can contribute to a student's preparedness for coursework and clinical responsibilities.<sup>6,14</sup>

Combining academic ability with practical experience creates a powerful combination in the admission process. The use of multidimensional evaluations ensures admitted students are academically competent and equipped with the practical understanding and skills needed to excel in the dental hygiene program.<sup>6,14</sup> About twenty-eight percent of dental hygiene admission programs incorporate previous experience into their admission process. Previous experience has positively influenced clinical performance, but has not shown any correlation to success on the NBDHE.<sup>9,12</sup>

Although letters of recommendation, interviews, and previous experience are often used as admission criteria, no conclusive evidence supports their effectiveness in predicting success on the NBDHE.<sup>9,14</sup> Despite being an important aspect of the admission process, research studies have not established a correlation between these criteria and candidates' performance on the NBDHE.

### **National Dental Hygiene Board Examination**

The National Dental Hygiene Board Examination (NBDHE) is a licensing tool for dental boards to assess the qualifications of aspiring dental hygienists

seeking licensure for entry-level.<sup>3,8</sup> The NBDHE is a comprehensive examination that tests candidates on various subjects, including dental hygiene sciences, patient management, community health, and ethical considerations. The Joint Commission on National Dental Examinations (JCNDE) is the governing body responsible for developing and administering the NBDE. The NBDHE is acknowledged by licensing authorities across the United States, including all 50 states, the District of Columbia, Puerto Rico, Guam, and the US Virgin Islands.<sup>8,16</sup>

The NBDHE examination is comprised of 350 multiple-choice questions. The examination contains a discipline-based component of 200 items and 150 case-based items involving 12-15 dental hygiene patient cases.<sup>4,8</sup> Candidates are required to obtain a minimum score of 75 to pass this licensure examination successfully. Test construction teams are comprised of experts on the subject-matter. They develop the examination guidelines and examination specifications endorsed by the JCNDE.<sup>8</sup> These teams are assembled based on their specialized expertise in six distinct areas: biomedical sciences, radiology, periodontics, dental hygiene curriculum, clinical dental hygiene, and community dental health.<sup>8</sup> According to Vital Boards, approximately 8,000 students take the NBDHE every year, and the pass rate in 2021 was approximately 77.3%.<sup>18</sup>

## **Summary**

The dental hygiene program admission process is essential for selecting qualified individuals to become dental hygienists. At the associate or bachelor degree level, these programs equip students with the skills and knowledge to provide preventive and therapeutic dental services. Admission criteria for these



programs are diverse, varying by institution and region. While specific requirements can differ, there are common standards, such as College and High school GPA scores, ACT scores, and prerequisite grades. Admissions criteria should be adapted to which outcomes will predict students' success. Such findings have significant implications for the selection process of dental hygiene candidates, ultimately contributing to improved program outcomes and the overall success of dental hygiene professionals in their national board assessments.

## **Chapter III: Methods and Materials**

### **Introduction**

This research was intended to explore the relationship between admission criteria utilized by dental hygiene programs and the success rate of candidates taking the National Dental Hygiene Board Examination (NBDHE). This study evaluated cognitive and non-cognitive admission criteria used for program admission, explicitly focusing on the performance of dental hygiene students who graduated between 2021 and/or 2022. The knowledge acquired from this research offered insight to admission committees, helping to identify factors that can predict success rates on the NBDHE and aiding in the development of admission criteria that will reliably predict student's success rates on the NBDHE.

### **Research Design**

The research methodology employed a descriptive approach to collect data using an electronic survey. The survey explored the admission requirements in entry-level dental hygiene programs and their correlation with student success on the NBDHE. Specifically, the study sought to identify prevalent cognitive and non-cognitive admission criteria and assessed the impact on student success for licensure.

The convenience sample was surveyed electronically through the online platform HSC Microsoft Forms to collect data. Dental hygiene program directors throughout the United States were contacted electronically via email invitation containing a link to the survey, allowing them to participate at their discretion. The survey included questions about admission requirements and student success

rates on the NBDHE. The retrospective study surveyed dental hygiene program directors, inquiring about graduate students from the 2021 and/or 2022 academic years.

### **Sample Selection**

The research sample population consisted of dental hygiene program directors responsible for overseeing admission selection. The sample of participants was based on the 327 entry-level programs identified through the Commission on Dental Accreditation (CODA). Inclusion criteria were programs with graduates from the 2021 and/or 2022 academic years. Participation in the research was entirely voluntary.

### **Data Collection**

The survey was distributed, with participants receiving an email containing a link to the survey, allowing them to complete it at their convenience. The survey remained open for four (4) weeks. The survey was comprised of seventeen (16) multiple-choice questions. The survey explored admission requirements and student success rates on the NBDHE within the dental hygiene graduate classes from 2021 and/or 2022. Survey data analysis was conducted using the HCS Microsoft Forms.

### **Data Analysis**

The data for this study were exported from Microsoft Forms into an Excel spreadsheet. Descriptive statistics and frequency distribution techniques were employed to summarize and interpret the data. The Spearman rank-order correlation coefficient was used to analyze the survey responses. The objective

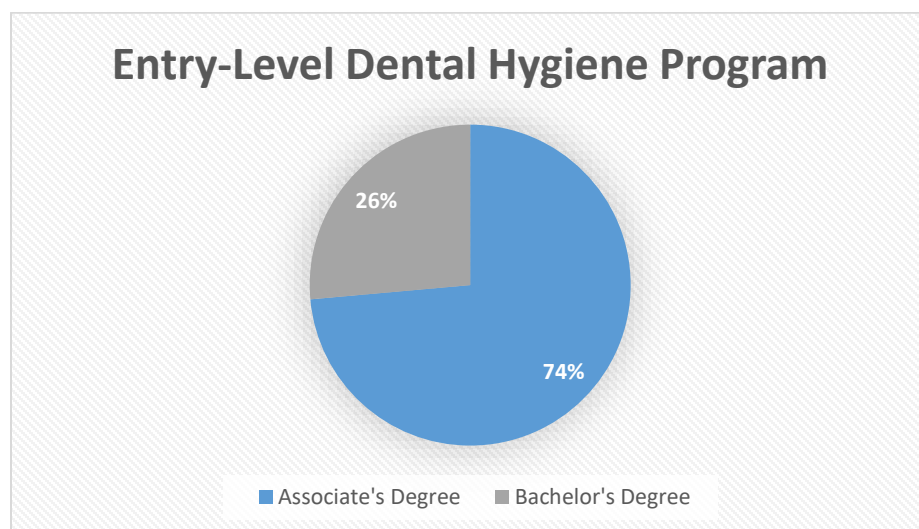
was to identify significant admission criteria distinguishing two groups: students who succeeded on the National Dental Hygiene Board Examination (NBDHE) and those who did not. This approach aimed to highlight the predictive value of various admission criteria in forecasting student performance on the NBDHE.

## Chapter IV: Results, Discussion, and Conclusion

### Summary of Results

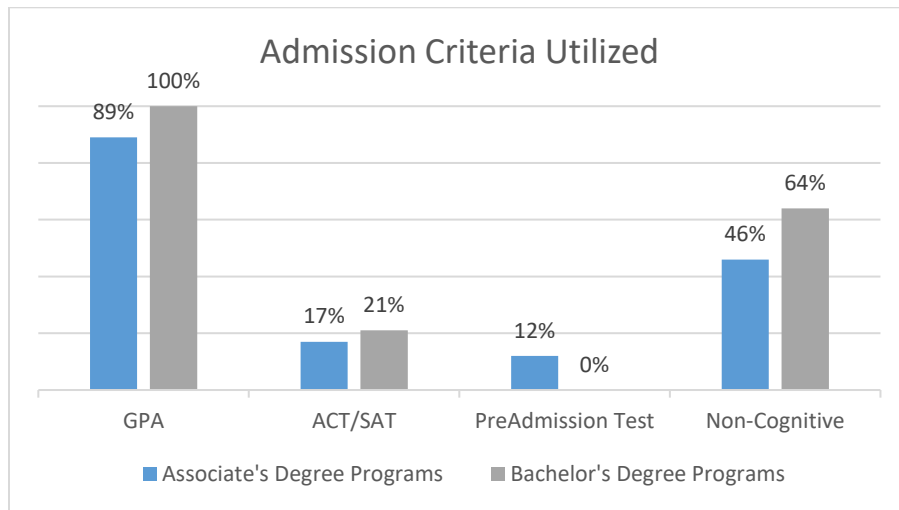
The survey invitation email was sent to 327 entry-level dental hygiene programs in the United States. The email included the informed consent cover letter and the Microsoft Forms survey link. The survey link was opened on March 28, 2024, and a follow-up email was sent on April 18, 2024, to remind participants to complete the survey. The survey link was open for four weeks. Microsoft Forms reported that 53 (n=53) volunteers responded to the survey, composed of 16 multiple-choice questions, for a response rate of 16%. The data was analyzed using an Excel spreadsheet.

Figure 1 represents the responses by type of entry-level dental hygiene programs. Most respondents (74%) reported their programs offer an Associate's Degree, while 26% offer a Bachelor's Degree.



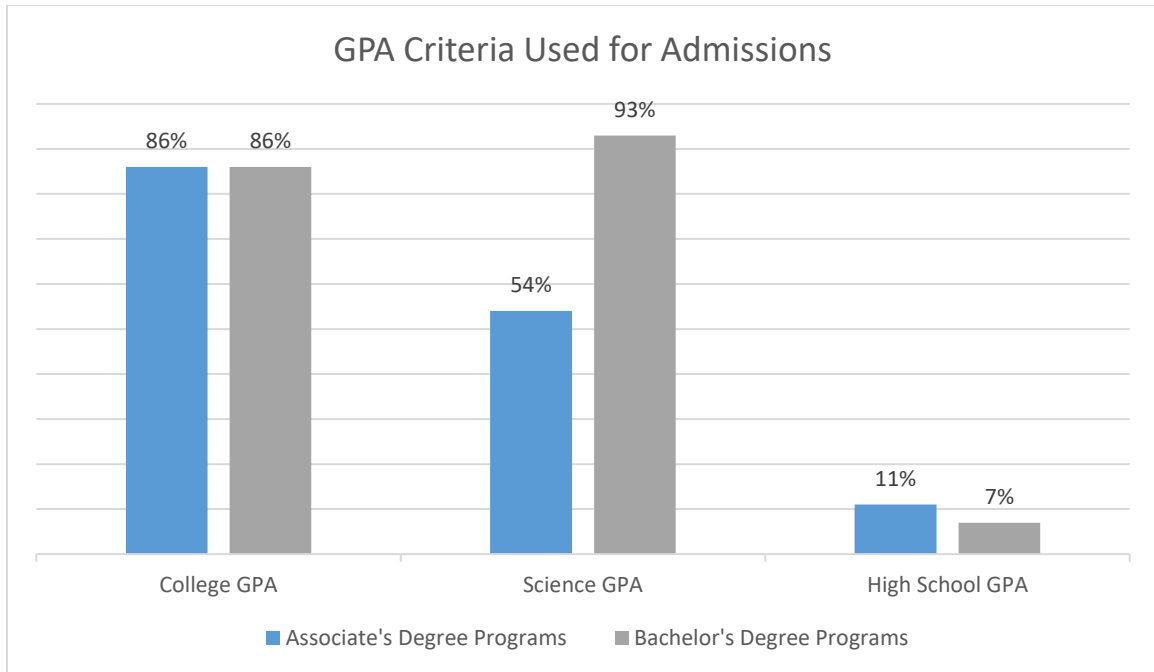
*Figure 1. Survey participants and their programs' education level.*

Figure 2 represents a summary of the admission criteria by program type. Associate programs reported using GPA (89% (n=35)), ACT/SAT scores (17% (n=8)), Preadmission Testing (12% (n =1)), and Non-cognitive criteria (46% (n =18)). Bachelor programs reported using GPA (100% (n=14)), ACT/SAT scores (21% (n =3)), and Non-Cognitive criteria (64% (n =9)).



*Figure 2: Survey of Admission Criteria used for program admission*

Eighty-nine percent (n=35) of Associate programs and 100% (n=14) of Bachelor programs reported using GPA during the admissions process. When asked, 86% (n=30) of Associate programs use College GPA, 54% (n=19) use Science GPA, and 11% (n=4) use High School GPA. In comparison, 86% (n=12) of Bachelor programs use College GPA, 93% (n=13) use Science GPA, and 7% (n=1) use High School GPA. Both dental hygiene programs consistently applied a mode range of 3.0-3.4 for College GPA and Science GPA. For High School GPA, both programs utilized the ranges 2.6-3.0 and 3.0-3.4 uniformly (Figure 3).



*Figure 3: GPA utilized for program admission*

The study revealed that using a College or Science GPA had no statistical significance with success on the NDBHE. The analysis also examined the connection between admission criteria and NBDHE pass rates. Table 1 shows the significant finding that high school GPA as a predictor for graduates from 2021 had a strong negative correlation (-.506) with the student's success on the NBDHE.

*Table 1. Correlation of GPA and Graduates of 2021*

Variable	Graduates of 2021		
<b>High School GPA</b>	-.506**	.001	39
<b>College GPA</b>	.133	.483	30
<b>Science GPA</b>	-.254	.510	9
<b>ACT/SAT</b>	-.188	.628	9

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Twenty-one percent (n=11) of the dental hygiene admission committees use ACT/SAT scores as part of their admission criteria. When asked what the minimum range for admission was, 91% (n=10) reported 19-16 or 1010-890. Of those 100% (n=8) of the Associates programs are using that ACT/SAT score while 67% (n=2) of the Bachelors programs reported using that score.

When asked if a preadmission test was used for admission criteria, 10% (n=1) responded yes, all of which represent Associate programs. The program reported using the Test of Essential Academic Skills (TEAS) as part of its admission criteria.

Fifty-one percent (n=27) of dental hygiene programs reported using non-cognitive criteria for admissions. Among those who used non-cognitive criteria, 24% (n =19) used interview scores, 20% (n=16) used previous experience, and 16% (n =13) used letters of recommendation. An additional 39% (n =31) selected



other non-cognitive criteria which includes open house attendance, job shadowing, written essays, personal statements, and occupational therapy exercises (Figure 4).

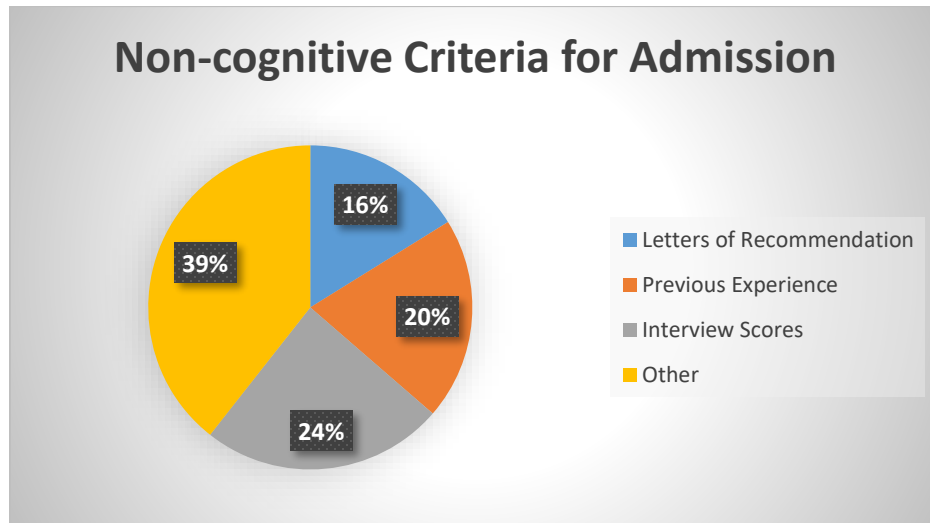


Figure 4: Non-cognitive criteria

When asked if their program utilizes a board review course for students to prepare for the National Dental Hygiene Board Examination (NBDHE), 68% (n=36) of the respondents indicated yes. Among the institutions offering Associate degrees, 69% (n=25) utilize a board review course, of which 44% require it. Meanwhile, 43% (n=6) of Bachelor degree programs utilize a board review course, with 67% (n=4) requiring it. Table 2 shows that graduates from 2021 (-.329) and 2022 (-.333) had a negative correlation between board review courses and student's success rate on the NDBHE.

Table 2. Correlation of Board Review Courses

Variable	Board Review Courses		
<b>Graduates of 2021</b>	-.333*	.038	39
<b>Graduates of 2022</b>	-.329*	.041	39

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

In 2021 and 2022, both Associate and Bachelor programs reported a pass rate of 95% or higher on the first attempt taking the NBDHE. Associate programs reported an average pass rate of 90.5% in 2021 and 94.3% in 2022, except for one respondent who did not have a graduating class in 2022. Bachelor programs, reported an average pass rate of 97.6% in 2021 and 95.9% in 2022. Figures 5 represent the pass rates for each program by coordinating year.

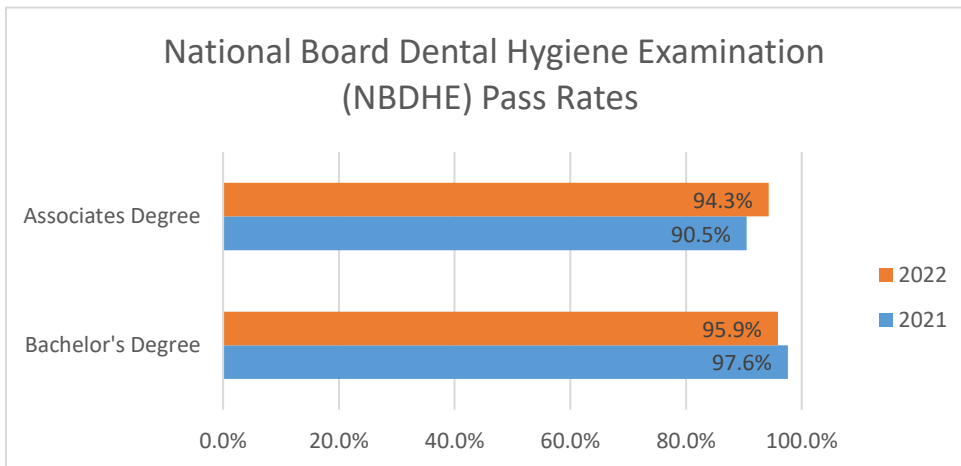


Figure 5: 2021-2022 NBDHE Pass Rates

## Discussion of Results

This study aimed to identify the criteria used by dental hygiene programs to determine the best predictors of success on the NBDHE. The mean for programs using a student's GPA was 92%. The study evaluated the correlation between various GPA criteria (College, Science, and High School GPA) and NBDHE success. It was found that College and Science GPA had no statistical significance in predicting success on the NBDHE. Furthermore, the analysis revealed a strong negative correlation (-.506) between High School GPA and NBDHE success for graduates in 2021. This correlation suggests that High School GPA should not be heavily weighted in the admission process for dental hygiene programs.

The research also evaluated standardized test scores and predictors of success on the NBDHE. The survey showed that 21% of the dental hygiene programs used the ACT/SAT as program admission criteria. However, the study revealed no statistical significance for ACT/SAT and NBDHE.

Regarding non-cognitive criteria used for program admission, 51% of the directors reported using this criterion. Some of the non-cognitive variables surveyed for this study were letters of recommendation, previous experience, interview scores, and other. Directors were able to select any that applied. Based on the data provided, there is no evidence of a correlation between the non-cognitive criteria used for program admission and the percentage of directors who reported using these criteria.

This study found that graduates from 2021 (-.329) and 2022 (-.333) showed a negative correlation between taking board review courses and their success rate on the NDBHE. Although board review courses were commonly used, the study indicates that taking board review courses does not positively impact students' success on the NBDHE.

While the aim of this study was to identify criteria used by dental hygiene programs to determine admission criteria that will best determine the success of the NBDHE, the study results are inconclusive. The study exhibited a strong negative correlation between high school GPA and NBDHE success, suggesting it should not be a heavily weighted criterion in admissions. Despite analyzing factors such as college GPA, science GPA, standardized tests, pre-admission tests, and non-cognitive criteria, the data did not demonstrate a meaningful relationship with NBDHE outcomes. Therefore, the findings indicate that the current admission criteria evaluated in this study do not effectively predict success on the NBDHE.

## **Conclusion**

This study has identified key admission criteria that negatively impact the success of the NBDHE. The findings suggest that dental hygiene programs should not prioritize High school GPA in their admissions processes. However, it is important to note the limitations of this study, including the limited sample size and criteria dental hygiene programs are using that were not reported. Another limitation is the potential for self-reporting bias in survey responses. Several recommendations are proposed for future research to enhance the understanding

and effectiveness of admission practices in dental hygiene education. First, efforts should be made to increase survey participation to ensure a more representative sample of entry-level dental hygiene programs. Additionally, further studies could investigate the impact of non-cognitive criteria in greater detail to provide a more comprehensive understanding of their role in predicting board exam success. The findings from this study reveal further research is needed on admission criteria and the National Dental Hygiene Board Examination success rate.

**Chapter V: Article for Submission**  
Journal of Dental Hygiene

Title Page

DENTAL HYGIENE PROGRAMS ADMISSION CRITERIA AS KEY INDICATORS  
TO NATIONAL BOARD SUCCESS

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## Abstract

**Purpose:** This study aims to evaluate the admission criteria used by entry-level dental hygiene programs in the United States and their relationship to National Dental Hygiene Board Examination (NBDHE) pass rates.

**Methods:** An online survey was distributed by email to 327 entry-level dental hygiene programs across the United States, collecting data on program admission criteria and NBDHE pass rates. The data was collected through a 16 question Microsoft Forms survey to evaluate criteria used by program directors for their admission process.

**Results:** Fifty-three respondents (n=53) participated in the survey with a response rate of 16%. The survey revealed that Grade Point Average (GPA) was the most common admission criterion, utilized by 92% of programs, 51% used non-cognitive criteria, and ACT/SAT scores were used by 21% of the programs. The research revealed that high school GPA demonstrated a strong negative correlation with NBDHE success. Non-cognitive criteria did not significantly impact NBDHE pass rates.

**Conclusion:** The study found no statistically significant correlation between the examined admission criteria and NBDHE pass rates. High school GPA did reveal a negative correlation which should not be heavily weighted in admissions due to its negative correlation with NBDHE success. These findings suggest that dental hygiene programs should reconsider emphasizing high school GPA in their admission processes. Further research with a larger sample size and a focus on

non-cognitive criteria is recommended to understand the potential impact on student success in dental hygiene education.

**Keywords:** Admission criteria, Dental hygiene, Program admission, National Dental Hygiene Board Examination

This manuscript supports the NDHRA priority area, **Client level: Professional Education and Development:** Identifying admission criteria and success on NBDHE.

## **Introduction**

Admission to dental hygiene programs is a critical step in the educational pathway of aspiring dental hygienists. Dental hygiene programs use academic criteria to determine program admission and carefully select candidates with the potential for academic success and possess the qualities necessary for success in the profession.<sup>1</sup> Admission criteria for dental hygiene programs vary across institutions and are multifaceted.<sup>2</sup> The success of dental hygiene students, as demonstrated by their performance on licensing board examinations, indicates program quality and effectiveness.<sup>3</sup> Identifying the key indicators that can be used to select potential candidates. Utilizing selective admission criteria ensures institutions will select the most qualified applicants.<sup>4</sup>

## **Cognitive Admission Criteria**

Dental hygiene programs typically use cognitive admission criteria set by program review committees as a significant part of the admission process into



educational programs. Cognitive criteria include academic transcripts, standardized test scores, prerequisite coursework, and other indicators of an applicant's academic capabilities.<sup>5</sup> Admission committees use these criteria to evaluate an applicant's previous academic success.<sup>3,5</sup>

### ***Grade Point Average (GPA)***

For many educational programs, GPA is commonly used in admission, with institutions and programs often having minimum GPA requirements.<sup>5</sup> Previous research has shown a correlation between a student's GPA after completing their first year and their GPA at the time of program entry, which may better indicate their success on the NBDHE.<sup>5</sup> Additionally, there is a correlation between success on the NBDHE and a student's graduating GPA.<sup>3</sup> Other research has reported the most reliable indicators of student success on the NBDHE were the dental hygiene GPA and performance in anatomy, psychology, sociology, and the social studies section of the ACT. Additionally, science GPA was a strong predictor of success on the NBDHE compared to the Dental Hygiene Aptitude Test (DHAT) and interview scores.<sup>7</sup> However, despite being necessary for maintaining academic standards, cognitive admission criteria are not always reliable predictors of a student's educational success.<sup>4</sup> Concrete evidence is needed to determine the best predictor of student success on the NBDHE.

### ***Standardized Test Scores***

American College Testing (ACT) requirements for program entry were the most common component of the admission process for many educational programs, mainly undergraduate programs at colleges and universities.<sup>5</sup> Twenty-

one percent of accredited dental hygiene programs use the ACT as part of the program's selection criteria.<sup>5</sup> Several studies have been conducted on the correlation of success on the NBDHE and ACT scores. One study revealed that an ACT score below the national and state average was correlated with failure of pre-requisite courses, while another demonstrated that a specific score on the reading portion of the ACT was correlated with success on the NBDHE.<sup>5</sup>

### **Non-cognitive Admission Criteria**

Dental programs will use non-cognitive admission criteria. These include attributes that extend beyond academic achievements, such as personal statements, interviews, letters of recommendation, manual dexterity, and psychomotor skills utilized to evaluate admission.<sup>5,8</sup>

### ***Recommendation Letters***

Recommendation letters are commonly incorporated into the application process for dental hygiene programs. Letters of recommendation are used by 26% of accredited dental hygiene programs for the admission process.<sup>5</sup> These letters are typically composed by individuals closely interacting with the applicant, such as teachers, employers, or dental professionals. While these letters can provide valuable insights into a candidate's work ethic, skills, and potential, they are also somewhat subjective and can be influenced by personal biases or relationships. Research indicates that these letters do not predict academic performance, and there is no literature to validate the use of these letters in admissions.<sup>5,10</sup>

## ***Interview***

Interviews are a tool for determining candidates for admission to healthcare programs.<sup>10</sup> Interviews objectively assess an applicant's communication skills, motivations, and overall personal qualities.<sup>5</sup> The use of interviews as part of the admission process has conflicting literature regarding its effectiveness. Some studies suggest that non-academic characteristics can be beneficial, while others indicate that they are not significant in predicting program success.<sup>8,9</sup>

## ***Field Experience***

Previous experience can be a criterion for admission. Hands-on experience in the field, as a dental assistant or provider in a healthcare capacity, indicates an understanding of the profession.<sup>11,12</sup> About 20% of dental hygiene admission programs incorporate previous experience into their admission process. Previous experience has positively influenced clinical performance but has not shown any correlation to success on the NBDHE.<sup>5,7</sup>

## **National Dental Hygiene Board Examination**

The National Dental Hygiene Board Examination (NBDHE) is a comprehensive examination that tests candidates on various subjects, including dental hygiene sciences, patient management, community health, and ethical considerations. The Joint Commission on National Dental Examinations (JCNDE) is the governing body responsible for developing and administering the NBDE. The NBDHE is acknowledged by licensing authorities across the United States,

including all 50 states, the District of Columbia, Puerto Rico, Guam, and the US Virgin Islands.<sup>8,x</sup> Approximately 8,000 students take the NBDHE every year, and the pass rate in 2021 was approximately 77.3%.<sup>14</sup> Candidates are required to obtain a minimum score of 75% to pass this licensure examination successfully.<sup>14</sup>

## **Methods**

The research methodology employs a descriptive design using an electronic survey. This study was approved by The University of New Mexico Institutional Review Board. Informed consent was obtained from all participants, and all methods followed relevant guidelines and regulations. The survey invitation email was sent by the Principal Investigator to 327 entry-level dental hygiene programs in the United States. The email included the informed consent cover letter and the Microsoft Forms survey link. The survey link was open for four weeks. The survey comprised 16 multiple-choice questions to collect program admission requirements and program pass rates on the NBDHE for 2021 and/or 2022.

## **Results**

Of the 327 entry-level dental hygiene program directors invited to participate, 53 (n=53) participated, resulting in a response rate of 16%. Most respondents (74%) reported that their programs offered an Associate's Degree, while 26% offered a Bachelor's Degree as their entry-level program. Respondents reported using different combinations of GPA variables, standardized tests,

preadmission testing and non-cognitive variables for program admission.

Associate programs reported using GPA (89% (n=35)), ACT/SAT scores (17% (n=8)), Preadmission Testing (12% (n =1)), and Non-cognitive criteria (46% (n =18)). Bachelor programs reported using GPA (100% (n=14)), ACT/SAT scores (21% (n =3)), and Non-Cognitive criteria (64% (n =9)). The percentage of participating programs that utilized each variable can be viewed in Table I.

Table I: Variable Used by Dental Hygiene Programs for Admission

	Associate Programs	Bachelor Programs
GPA	89%	100%
ACT/SAT	17%	21%
Preadmission Testing	12%	0%
Non-cognitive Criteria	46%	64%

Eighty-nine percent (n=35) of Associate programs and 100% (n=14) of Bachelor programs reported using GPA for the admissions process. When asked, Associate programs use 86% (n=30) use College GPA, 54% (n=19) use Science GPA, and 11% (n=4) use High School GPA. In comparison, in Bachelor programs, 86% (n=12) use College GPA, 93% (n=13) use Science GPA, and 7% (n=1) use High School GPA. Table II illustrates the GPA criteria used for dental hygiene admissions. Both types of dental hygiene programs use an average minimum range of use 2.9 for College GPA, 3.0 for Science GPA, and 3.0 for High School GPA.

Table II: GPA Criteria used for Admission

	Associate Programs	Bachelor Programs
College GPA	86%	86%
Science GPA	54%	93%
High School GPA	11%	7%

Twenty-one percent (n=11) of the dental hygiene admission committees use ACT/SAT scores as part of their admission criteria. When asked what the minimum range for admission was, 91% (n=10) reported 19-16 or 1010-890. Of those 100% (n=8) of the Associate programs are using that ACT/SAT score while 67% (n=2) of the Bachelors programs reported using that score.

When asked if a preadmission test was used for admission criteria, 10% (n=1) responded yes, all of which represent Associate programs. The program reported using the Test of Essential Academic Skills (TEAS) as part of its admission criteria.

The survey showed that 21% (n=11) of the dental hygiene programs used the Standardized Test for program admission criteria. When asked what the minimum range for admission was, 91% (n=10) reported 19-16 or 1010-890. Of those, 100% (n=8) of the Associate programs use ACT/SAT scores, while 67% (n=2) of the Bachelor programs reported using that score. However, the study revealed no statistical significance for standardized tests and NBDHE.

Regarding non-cognitive criteria used for program admission, 51% (n=27) of the directors reported using this criterion. Some of the non-cognitive variables surveyed for this study were letters of recommendation, previous experience, interview scores, and other. Among those who used non-cognitive criteria, 24% (n=19) used interview scores, 20% (n=16) used previous experience, and 16% (n=13) used letters of recommendation. An additional 39% (n=31) selected other non-cognitive criteria which includes open house attendance, job shadowing, written essays, personal statements, and occupational therapy exercises. Directors were able to select any that applied.

When asked if their program utilizes a board review course for students to prepare for the National Dental Hygiene Board Examination (NBDHE), 68% (n=36) responded yes. Among the institutions offering Associate degrees, 69% (n=25) utilize a board review course, of which 44% require it. Meanwhile, 43% (n=6) of Bachelor degree programs utilize a board review course with 67% (n=4) requiring it.

### **NBDHE Pass Rates**

The participating programs provided the percentage of students who passed the NBDHE on the first attempt. The mean national board pass rate was 95% or higher of students who passed the NBDHE on their first attempt. The average pass rates by year are shown in Table III with the Associate's degree programs, with an average pass rate of 90.5% in 2021 and 94.3% in 2022, except for one respondent who did not have a class that year. The mean pass rate for the

Bachelor’s degree programs was 97.6% in 2021 and 95.9% in 2022. Figure 3 represent each programs pass rates by year.

Table III: Dental Hygiene Program Pass Rates

	<b>Dental Hygiene Program Pass Rates</b>	Mean
2021	Associate’s Degree Programs	90.5%
	Bachelor’s Degree Programs	97.6%
2022	Associate’s Degree Programs	94.3%
	Bachelor’s Degree Programs	95.9%

## Discussion

This study aimed to identify criteria used by dental hygiene programs to determine admission criteria that will best determine the success of the NBDHE. The mean for dental hygiene programs using a student's GPA was 92%. When evaluating the GPA criteria and success on the NBDHE, the study looked at College, Science, and High school GPA. The study revealed that using a College or Science GPA had no statistical significance with success on the NBDHE. The analysis also examined the connection between admission criteria and NBDHE pass rates. Table IV shows the significant finding that high school GPA as a predictor for graduates from 2021 had a strong negative correlation (-.506) with the student's success on the NBDHE, suggesting that High School GPA should



not be a criterion heavily weighted for program admission. The research also evaluated standardized test scores and predictors of success on the NBDHE.

Table IV: *GPA and Graduates of 2021.*

Variables	Graduates of 2021		
<b>High School GPA</b>	<b>-.506**</b>	.001	39
<b>College GPA</b>	.133	.483	30
<b>Science GPA</b>	-.254	.510	9
<b>ACT/SAT</b>	-.188	.628	9

\*. *Correlation is significant at the 0.05 level (2-tailed).*

\*\**. Correlation is significant at the 0.01 level (2-tailed).*

The study also evaluated NBDHE pass rates with board review courses taken. The survey directors were asked if their students took a board review course. Table V shows that graduates from 2021 (-.329) and 2022 (-.333) had a negative correlation between board review courses and student's success rate on the NBDHE. This data suggests that program directors should refrain from strongly endorsing board review courses as part of the program's NBDHE preparation.

Table V: *Correlation of Board Review Courses*

Variable	Board Review Courses		
<b>Graduates of 2021</b>	-.333*	.038	39
<b>Graduates of 2022</b>	-.329*	.041	39

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The research did not reveal any significant correlation between the admission criteria examined and the success rates of the NBDHE. Despite analyzing factors such as high school GPA, college GPA, science GPA, standardized tests, pre-admission tests, and non-cognitive criteria, the data did not demonstrate a meaningful relationship with NBDHE outcomes. Specifically, high school GPA exhibited a strong negative correlation with NBDHE success, suggesting it should not be a heavily weighted criterion in admissions. Other criteria, including the utilization of board review programs and non-cognitive factors like interview scores and letters of recommendation, also showed no positive impact on pass rates. Therefore, the findings indicate that the current admission criteria evaluated in this study do not effectively predict success on the NBDHE.

## **Conclusion**

This study has identified key admission criteria that negatively impact the success of the NBDHE. The findings suggest that dental hygiene programs should not prioritize High school GPA in their admissions processes. However, it is important to note the limitations of this study, including the limited sample size and criteria dental hygiene programs are using that were not reported. Another limitation is the potential for self-reporting bias in survey responses. Several recommendations are proposed for future research to enhance the understanding and effectiveness of admission practices in dental hygiene education. First, efforts should be made to increase survey participation to ensure a more representative sample of entry-level dental hygiene programs. Additionally, further studies could investigate the impact of non-cognitive criteria in greater detail to provide a more comprehensive understanding of their role in predicting board exam success. The findings from this study reveal further research is needed on admission criteria and the National Dental Hygiene Board Examination success rate.

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## Appendices

### Appendix A: Approval Letter



#### Human Research Protections Program

March 26, 2024  
Robin Gatlin  
robing@salud.unm.edu

Dear Robin Gatlin:

On 3/26/2024, the HRRC reviewed the following submission:

Type of Review: Initial Study  
Title of Study: DENTAL HYGIENE PROGRAMS ADMISSION CRITERIA AS  
KEY INDICATORS TO NATIONAL BOARD SUCCESS  
Investigator: Robin Gatlin  
Study ID: 24-128  
Submission ID: 24-128

IND, IDE, or HDE: None

Submission Summary: Initial Study

Documents Approved: • HRP-507a-UNM-Consent-Survey-Research v5.23.19(7).pdf  
• HRP-583 - Exempt Category 2 Protocol v03.16.2021(9).pdf  
• Recruitment Letter

Review Category: EXEMPTION: Categories (2)(i) Tests, surveys, interviews, or  
observation (non-identifiable)

Determinations/Waivers: Employees.  
Provisions for Consent are adequate.  
HIPAA Authorization Addendum Not Applicable.

Submission Approval Date: 3/26/2024  
Approval End Date: None  
Effective Date: 3/26/2024

The HRRC approved the study from 3/26/2024 to inclusive. If modifications were required to secure approval, the effective date will be later than the approval date. The "Effective Date" 3/26/2024 is the date the HRRC approved your modifications and, in all cases, represents the date study activities may begin.

Because it has been granted exemption, this research is not subject to continuing review.



## Human Research Protections Program

Please use the consent documents that were approved by the HRRC. The approved consents are available for your retrieval in the "Documents" tab of the parent study.

**If the study meets the definition of an NIH Clinical Trial, the study must be registered in the ClinicalTrials.gov database. Additionally, the approved consent document(s) must be uploaded to the ClinicalTrials.gov database.**

This determination applies only to the activities described in this submission and does not apply should you make any changes to these documents. If changes are being considered these must be submitted for review in a study modification to the HRRC for a determination prior to implementation. If there are questions about whether HRRC review is needed, contact the HRPO before implementing changes without approval. A change in the research may disqualify this research from the current review category. You may submit a modification by navigating to the active study and clicking the "Create Modification/CR" button.

If this study is approved for a waiver of HIPAA authorization, the IRB had determined the use or disclosure of protected health information in this study involves no more than a minimal risk to the privacy of individuals because the study contains a plan to protect the identifiers from improper use and disclosure, a process to destroy the identifiers at the earliest opportunity consistent with conduct of the research, and there are written assurances that the protected health information will not be reused or disclosed to any other person or entity, except as required by law, for authorized oversight of the research study, or for other research for which the use or disclosure of protected health information would be permitted. The IRB recognizes that the research could not practicably be conducted without the waiver, and could not practicably be conducted without access to and use of the protected health information.

If your submission indicates you will translate materials post-approval of English materials, you may not recruit or enroll participants in another language, until all translated materials are reviewed and approved.

In conducting this study, you are required to follow the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library.

Sincerely,

A handwritten signature in black ink, appearing to read 'Thomas F. Byrd, MD'.

Thomas F. Byrd, MD  
HRRC Executive Chair

## **Appendix B: Informed Consent Letter**

### **The University of New Mexico Health Sciences Center Consent and Authorization to Participate in a Research Study**

Dear Prospective Participant,

Researchers at the University of New Mexico are inviting you to take part in a survey DENTAL HYGIENE PROGRAMS ADMISSION CRITERIA AS KEY INDICATORS TO NATIONAL BOARD SUCCESS., [study ID], about admission criteria utilized for dental hygiene program entry and student success rates on the National Dental Hygiene Board Exam. The goal is to explore the relationship between admissions and student success on the NBDHE. You are receiving this email because you are a dental hygiene program director in the United States. The knowledge acquired from this research will offer insight to admission committees to identify factors that can predict success rates on the National Dental Hygiene Board Examination and aid in developing admission criteria that will reliably predict student's success rate for licensure.

#### **WHAT ARE THE KEY REASONS YOU MIGHT CHOOSE TO VOLUNTEER FOR THIS STUDY?**

The knowledge acquired from this research will offer valuable insight to admission committees to identify factors that can predict success rates on the National Dental Hygiene Board Examination and aid in developing admission criteria that will reliably predict student's success rate.

Although you may not get personal benefit from taking part in this research study, your responses may help us understand more about admission criteria and correlation with success of students on the National Dental Hygiene Board Exam

#### **WHAT ARE THE KEY REASONS YOU MIGHT NOT CHOOSE TO VOLUNTEER FOR THIS STUDY?**

Your time is valuable and this study may require you to research past graduates and take a few minutes of your time.

The survey/questionnaire will take about 10-15 minutes to complete.

There are no known risks to participating in this study.

Your response to the survey is anonymous which means no names will appear or be used on research documents, or be used in presentations or publications. The research team will not know that any information you provided came from you, nor even whether you participated in the study. Your response to the survey will be kept confidential to the extent allowed by law. When we write about the study and its results you will not be identified.

We hope to receive completed questionnaires from program directors on admission criteria your program utilizes and success of students on the NBDHE, so your answers are important to us. Of course, you have a choice about whether or not to complete the survey/questionnaire, but if you do participate, you are free to discontinue at any time.

Please be aware, while we make every effort to safeguard your data once received from the online survey company, given the nature of online surveys, as with anything involving the Internet, we can never guarantee the confidentiality of the data while still on the survey company's servers, or during transmission to either them or us. It is also possible the raw data collected for research purposes will be used for marketing or reporting purposes by the survey/data gathering company after the research is concluded, depending on the company's Terms of Service and Privacy policies.

Please be aware, while we make every effort to safeguard your data once received on our servers, given the nature of online surveys, as with anything involving the Internet, we can never guarantee the confidentiality of the data while being transmitted to us.

If you have questions about the study, please feel free to ask; my contact information is given below. If you have questions regarding your legal rights as a research subject, you may call the UNM Human Research Protections Office at (505) 272-1129.

Thank you in advance for your assistance with this important project. To ensure your responses will be included, please submit your completed survey by [date]. By clicking on the link below, you will be agreeing to participate in the above described research study.



[survey link]

Sincerely,

Robin A. Gatlin, MS, RDH

Department of Dental Medicine, University of New Mexico Health Sciences

PHONE: 505-272-0838

E-MAIL: [robing@salud.unm.edu](mailto:robing@salud.unm.edu)

## Appendix C: Survey

### DENTAL HYGIENE PROGRAMS ADMISSION CRITERIA AS KEY INDICATORS TO NATIONAL BOARD SUCCESS

Kacy Goetz

1. Did you have a class graduate in 2021 or 2022 that took their NBDHE?

Yes

No \* End of survey

2. What entry-level dental hygiene program does your institution offer?

A. Associate degree

B. Bachelor degree

C. Certificate

3. What percentage of your graduates from 2021 passed the NBDHE on their first attempt?

A. >95%

B. 90-94%

C. 85-89%

D. 80-84%

E. 75-79%

F. <74%

4. What percentage of your graduates from 2022 passed the NBDHE on their first attempt?

A. >95%

B. 90-94%

C. 85-89%

D. 80-84%

E. 75-79%

F. <74%

5. Does your program utilize GPA criteria for admission?

Yes \*Branched #6, 7, 8

No \*Branched #9

6. What is the minimum range for College GPA required for program admission?

- A. >3.75
- B. 3.5-3.75
- C. 3.0 - 3.4
- D. 2.6-2.9
- E. 2.0-2.5
- F. <2.0
- G. This GPA is not used

7. What is the minimum range for Science GPA required for program admission?

- A. >3.75
- B. 3.5-3.75
- C. 3.0 - 3.4
- D. 2.6-2.9
- E. 2.0-2.5
- F. <2.0
- G. This GPA is not used

8. What is the minimum range for High School GPA required for program admission?

- A. >3.75
- B. 3.5-3.75
- C. 3.0 - 3.4
- D. 2.6-2.9
- E. 2.0-2.5
- F. <2.0
- G. This GPA is not used

9. Does your program utilize ACT or SAT scores for program admission?

Yes \*Branched #10

No \*Branched #11

10. What is your minimum range for ACT/SAT score for program admission?

- A. 36-33 / 1600-1460
- B. 32-28 / 1430-1310
- C. 27-24 / 1280-1180
- D. 23-20 / 1140-1040
- E. 19-16 / 1010-890
- F. <15 / <850

11. Does your program require a preadmission test for admission?

Yes \*branched #12

No \*branched #13

12. Which of the following preadmission tests does your program utilize?

A. Test of Essential Academic Skills (TEAS)

B. Dental Hygiene Assessment Exam (DHAE)

C. Admission Test for Dental Hygiene (ATDH)

D. Other (please describe): \_\_\_\_\_

13. Does your program utilize non-cognitive criteria for program admission?

Yes \*Branched #14

No \*Branched #15

14. Which of the following non-cognitive criteria is used by your program for program admission? (select all that apply)

A. Letter of recommendation

B. Previous dental experience

C. Interviews

D. Other (please describe): \_\_\_\_\_

15. Does your program utilize a board review course for students to prepare for the NBDHE?

Yes \*branched #16

No \*End

16. Is your board review course required or recommended?

Required

Recommended

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