

The Use of Digital Media by State Dental Boards in Licensure and Enforcement of Oral
Health Professionals; A Survey

THESIS

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Abstract

The importance of upholding and maintaining professionalism is even greater in a world connected by the click of a button. Identifying behaviors that pose potential violation of privacy and security aspects will help uphold the integrity of businesses, employers, employees, clients and patients. Studies suggest that specific consequences of violation of professionalism and other ethical standards have not been well established. This study will explore the ways in which licensing of a dental professional is effected by digital media unprofessionalism. This study employed a non-experimental descriptive electronic survey research design. A total of 52 surveys were sent to the dental board executive directors and the California dental hygiene executive directors in the United States. Eighteen responses were collected for a 34.6 percent response rate. Overall, respondents indicated a lack of social media usage by state dental boards. Incidents of online unprofessional behavior came to the attention of the board in various ways and various consequences. Overall level of concern about online activities by licensees that may be in violation of laws, rules and regulations of the state or the dental board exists yet no state dental boards are currently creating a social media policy. As common as social media presents in society today, specific social media policies are limited on a professional board level. Dental boards should consider developing policies to address potential online unprofessionalism to protect businesses, employers, employees, clients and patients.

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Chapter 1: Review of the Literature

Background of the Problem

Social media has flooded the 21st century. As time passes, social media and technology have woven themselves into almost every life aspect. Smartphone devices unleash an abundance of access to the internet and have changed the way in which society communicates and networks.¹ With sites and social media outlets like Facebook, Twitter, LinkedIn and Instagram, understanding the benefits and dangers of posting secure information and thoughts is a valuable concept to grasp. The importance of upholding and maintaining professionalism is even greater in a world connected by the click of a button. Identifying behaviors that pose potential violation of privacy and security aspects will help uphold the integrity of businesses, employers, employees, clients and patients. Studies suggest that specific consequences of violation of professionalism and other ethical standards have not been well established.² Exploring the ways in which licensing of a dental professional is effected by social media needs to be explored. According to the General Dental Council, social media has the potential to breach professional conduct and expose dental professionals. Regulatory bodies in the UK published guidelines for social media back in 2013 which is different from the United States where individual medical schools rather than national professional bodies have drafted and locally enforced social media guidelines.¹ Now more than ever personal and

professional lives overlap and professionals need to be conscious of their actions on social media sites.

Statement of the Problem

The general research questions explored in the study are: How often is social media used in cases involving state dental boards? Do dental boards in the United States receive complaints of social media by dental professionals? Do they adjudicate dental professionals who violate the laws through social media through suspension, fines, or continuing education courses? How do dental boards utilize social media?

Significance of the Problem

Advancement in technology in the past decade has created a new social phenomenon. Social media is no longer used for connecting with solely people you may know but it can connect one to the other side of the world. Smartphones have nearly made it impossible to step away from technology, getting a notification anytime a comment, like, tag, tweet, or repost occurs. It creates potential hazard by blurring the personal-professional divide, colouring personal and professional reputations, displaying dangers of self-expression and violating patient confidentiality.¹ While various professional entities have their code of ethics and definition of professionalism to uphold, e-professionalism is not as definitive. “Physicians have sworn to protect the public good with the maxim ‘first, do no harm’.”² Similarly, dental professionals follow a code of ethics.³ The American Dental Hygienists’ Association (ADHA) defines standards of professional responsibility in its bylaws for the code of ethics. In a recent article by Humphrey, it indicates that social media behavior influences public perception of the

profession.⁴ As studies in which social media affects the professional world are conducted, it is important to focus on careers in which patient safety and security are highly valued and maintain the utmost respect for ourselves, others and the profession. A study by state medical boards “highlighted unprofessional online content in categories including depicted intoxication, sexually explicit material, conflicts of interest, and violations of patient privacy.”² Online professional guidelines were issued by the American Medical Association but were uncertain of professional consequences that would be set forth for specific violations. Because of this, state medical boards were surveyed using hypothetical vignettes to determine consequences for behaviors of unprofessionalism by social media. The findings of the study revealed high consensus among state boards for probable investigations mostly on online misinformation, inappropriate communication with patients and posting of patient images without consent.² Additionally, the Federation of State Medical Boards clearly identified that state dental boards can discipline physicians for use of social media to make derogatory or discriminatory marks about patients.² Refraining from such behavior and understanding pitfalls in the use of social media ensures safety for the patient and the professional. In the British Dental Journal, the General Medical Council are focusing on social media and the impact it has on healthcare professionals. Furthermore, it discusses that American research “indicates that medical and pharmacy students are confused about the ethical, legal, and professional implications of their online behavior and activities.”¹ Identifying if dental professionals understand ethical, legal and professional implications of their online behavior and activities holds value in maintaining patient trust and the dental profession.

Research Questions

Do dental boards in the United States receive complaints of social media by dental professionals?

Do they adjudicate dental professionals who violate the laws through social media through suspension, fines, or continuing education courses?

How do dental boards utilize social media?

Operational Definition

For the purpose of this study, the following terms will be defined. Social media is defined as the websites and applications that enable users to create and share content or to participate in social networking to include Facebook, Twitter, and Instagram.

Professionalism is the skill, good judgment, and polite behavior that is expected from a person who is trained to do a job well. E-professionalism is defined as the attitudes and behaviors that reflect traditional professionalism paradigms but are manifested through digital media.⁵ The HIPAA Privacy Rule provides federal protections for individually identifiable health information held by covered entities and their business associates and gives patients an array of rights with respect to that information.

Social media debuted in the 1970s with the Bulletin Board System (BBS) and has since evolved into a cultural phenomenon into 2015.⁶ The BBS was an online meeting place that was accessed over telephone lines and continued to gain popularity into the 1990s when the Internet began to go mainstream. As the Internet and social media grew from its beginning stages with CompuServe, SixDegree, and Classmates, it was in 2002 that social networking began to take stride with the launch of Friendster. The social network aspect

of Friendster has since ended and it remains an online gaming site. In the following years, LinkedIn, MySpace and Facebook came to flourish by 2006. The success of MySpace has now shifted to a site for bands and musicians while Facebook remains the leading global social network with more than 1.3 billion users.⁶ With the rise of mobile devices and “fourth screens” such as smartphones and tablets, applications such as SnapChat and Instagram have entered the mainstream of social networking. Mobile devices provide access to a variety of information all in the palm of a hand. Each social media platform has its characteristics that are engaging to its users. Facebook is known for its social networking, Twitter for microblogging, Instagram for sharing public photos, and SnapChat for sharing private photos. In more recent years since November 2013, anonymous social media platforms such as Whisper, Yik Yak and Secret have emerged.⁷

A survey completed in 2014 reveals that multi-platform use is on the rise. Fifty-two percent of online adults now use two or more social media sites, a significant increase from 2013, when it stood at forty-two percent of internet users.⁸ Among the top four social media applications from a survey completed in June 2014, Facebook came in first with 75.6% user rating followed by Instagram with 43.1%, Snapchat with 32.9% and Twitter with 23.8% amongst 18-34 year olds.⁹ While millennials are among the highest users of social media, other generations take part in the social media buzz as well. In an article by Ventola, use of social media by the general public has increased greatly since 2005 from eight to seventy-two percent.¹⁰ As the social media activity has increased, the reasons and shifts in how social media is used has also evolved. Initially, connecting with friends and family was a primary reason for individuals to become involved with social media. It was a tool that allowed people to stay in connection with one another and

reestablish inactive relations. Others also used it as a way to connect with people that shared a common hobby and profession as well as connecting with public figures.¹¹ In a recent study by Smith, there was an increase since 2013 of Facebook and Twitter users utilizing those social media outlets to obtain news information.¹² Growth of news in social media is influenced by personal behavior and increased activity and advertising by news organizations.

Social media has crossed into healthcare increasing the need to maintain professionalism, patient privacy and employee safety. While social media is the latest hype, there are benefits and risks that are associated that all need to be aware of including healthcare professionals. Social media provide healthcare professionals with tools to share information, discuss policy and practice issues, and educate and communicate with patients and the public.¹⁰ A survey conducted by QuantiaMD revealed that more than 90% of physicians use some form of social media for personal activities, whereas only 65% use these sites for professional reasons. Increase in both personal and professional uses of social media is increasing raising the question for potential dangers of social media use and healthcare professionals.¹⁰ Social media risks include poor quality of information, damage to professional image, breaches of patient privacy, violation of patient and healthcare professional boundary, licensing issues and legal issues.¹⁰ Professionalism has long been a core value of many companies and organizations. According to British Dental Journal, professionalism is a needed competency in both undergraduate and postgraduate studies to act effectively and ethically.¹³ Knowledge of professional acts and ethical concerns are established early on to understand the appropriate behaviors to one self, to classmates, to educators, and to patients. Social

media makes it harder for individuals to separate private and professional lives and the distinct difference continues to blur as social media grows. Facebook allows the public, including patients and patients' families, to search out trainees and practicing physicians and to find comments and pictures that can be detrimental to the professional image of the practitioner and the medical institution.¹⁴ In an assessment of surgical resident Facebook pages, unprofessional content was identified. The study found that residents are more likely to be dismissed from a program for unprofessionalism rather than cognitive failure.¹⁴ In a study of dental and dental hygiene students in one college of dentistry, it was more likely that dental hygiene students had a Facebook account compared to dental students. Most had enable some privacy settings with only 4% being entirely public. During the study, fourteen instances of unprofessionalism were found on the profiles.¹⁵ It is vital that healthcare professionals understand that online information is not always private. Individuals are responsible for their words and actions and must realize that even deleted items on the web can be traced. Online actions can be linked to professional identity and have consequences.¹⁶ In an article by Milton, ethical-straight thinking obligations for nursing students are discussed. In any event, maintaining professionalism is important in upholding trust and protecting HIPAA. Violating these private relationships opens door to possible litigation as well as the possible loss of societal trust in the discipline of nursing.¹⁶ Violations within any professions can hurt the image of healthcare and therefore, must be maintained at all time.

Social media policies have begun to make their appearance in employee handbooks nationwide. A survey by Proskauer revealed that 90% of businesses use social media in some aspect.¹⁷ As social media increases, there has been a greater need to

extend the social media policy to ensure that individuals are upholding themselves to high standards and representing themselves and the potential company or organization in a positive manner. According to the same survey, in the last year, businesses have focused on implementing and reviewing social media policies. Social media policies in businesses have increased from 60% to 80% with more than half of businesses updating their policies. Additionally, precautions are being taken to reduce misuse of confidential information, misrepresenting the views of the business, inappropriate non-business use, and harassment.¹⁷ In turn, institutions of higher education are finding the need to implement social media policies as well.¹⁸ A study of U.S. dental schools revealed 34.8% of dental schools had social media policies and that of the twenty-three responding dental schools, all had an official social media page. This study should encourage dental educators and administrators to raise awareness of social media professionalism in their dental schools.¹⁸ Social media can be utilized to promote courses and communicate with students in programs.¹

Social media can negatively affect individuals going through credentialing or licensing process. Although literature has explored the ways in which social media can effect medical professionals, there has been little for dental professionals. State medical boards discipline physicians as needed to include restricting, suspending or revoking licenses.¹⁰ An example of such social media violations included an emergency medicine physician who was fined after making comments on Facebook about a patient. Although a name was not released, pertinent information that led to the identity was enough for the Rhode Island State Board to take action for unprofessional conduct.¹⁰ Additionally, consequences for specific violations by physicians have not been explored.² Studies of social media use by

medical students and physicians have highlighted unprofessional content and previous research has shown that 60% of U.S. medical school deans had concern for students posting unprofessional content.² A study involving 70 state medical boards evaluated online professionalism investigations. Surveys with ten hypothetical vignettes were sent to the medical boards to see what would prompt investigation. Among the high consensus for investigation were misinformation on physician practice website, misleading claims of treatment outcomes, misrepresentation of board certification, patient confidentiality, and inappropriate communication with patients.² With the results, gray areas need to be addressed to specifically address issues with online professionalism. Conducting a survey based on non-hypothetical situations will give greater insight to the issues of online professionalism and the best ways to deal with such violations.² Additionally in reviewing the nurse investigation process, gives all professions insight on the importance of maintaining professionalism. The idea of the Board is to protect the public. They are to investigate allegations against such nurses to seek the truth and any penalty that should be involved. "The source of the complaint could be from any number of sources such as a patient, family members or friends of a patient, coworkers, employers or even perfect strangers who have observed what they believe is unprofessional conduct or poor delivery of care."¹⁹ Violations and guilty charges are made public and part of a permanent record. In the event that a license is restored to good standing, the disciplinary action faced could have lingering effects. In an article by Small, nurses may have difficulty finding employment if they are excluded from a Medicaid provider list. This disciplinary action prevents them from working for an employer that receives Medicaid reimbursement. Also, licensure obtainment in another state could be limited as well in another field.¹⁹

Social media has only just began in the past few decades. On a daily basis, individuals of all ages and backgrounds continue to join social media sites such as Facebook, Twitter, and Instagram. While some use for the social aspect, there are educational pages and blogs that can be beneficial. With that being said, as healthcare professionals continue to engage in social media activities, it is vital that they uphold professionalism both in person and online. Online information is not well protected and can be easily skewed or hacked to misrepresent information. In reviewing the literature, violations for such unprofessional acts on social media sites need to be explored further to examine the amount and types of violations and the punishment that can occur if found in violation, especially for dental professionals. The purpose of this study is to identify potential risks that social media has on the licensure of dental professionals by looking at U.S. state dental boards and the complaints received.

State dental boards are regulatory bodies meant to protect the public, professionals, and the profession. State dental boards discipline licensees who violate dental practice acts. It is important to note that while each state has their own dental board including the District of Columbia, each of them are composed of a various number of members on the board including dentists, dental hygienists and public members. Overwhelmingly, state dental boards are composed of more dentists than dental hygienists and public members combined. For comparison, Texas state dental board is composed of eight dentists, two dental hygienists and three public members; Louisiana state dental board is composed of thirteen dentists, one dental hygienist and no public members; Ohio is composed of nine dentists, three dental hygienists and one public member. This variation is important to

consider when evaluating potential consequences and actions of licensees to ensure the public is represented fairly for safety of all. ²⁰⁻²⁶

Chapter 2: Materials and Methods

This research will focus on studying the effects of social media on the licensure process of dental professionals. Previous studies have focused on other professions such as medicine and the effects of social media but have not explored dentistry. This study will look at individual state boards to evaluate complaints of social media by dental professionals, penalties for violation of state dental board laws and the uses of social media by dental boards.

An electronic survey research design was used for this study. A modified survey from Greyson et al. publication “Online Professionalism Investigations by State Medical Boards: First, Do No Harm” was sent via email to each state dental board executive director. Email addresses were collected from the American Association of Dental Boards website in conjunction with individual state dental board websites. The survey included 19 questions containing multiple choice and open ended questions related to the use of social media and online professionalism within dentistry. One survey was collected from each dental board. An initial email was sent to all participants with follow-up emails sent at weeks two, four and six. Follow-up phone calls were made at week five and eight. One final email was sent to all participants who had not responded at week ten. Data collection took place from November 2015 through February 2016.

The sample population included executive directors of all state dental boards in the United States including California's dental hygiene board. A total of 52 surveys were sent. Researchers sent an initial email to the executive director of the dental board with a cover letter to explain the purpose of this particular research and a link. Qualtrics (Provo, Utah) software was used to conduct the survey. Agreement to participate in the survey was established with the return of the survey. Descriptive statistics were used to analyze the results.

Chapter 3: Results

Eighteen responses were collected from state dental board directors for a 34.6 percent response rate. Respondents were not required to answer all questions, so totals for each question differ. Demographics and social media usage by state dental boards are summarized in Tables 1 and 2. Respondents to the survey were located in a wide geographic range in the United States. Overall, respondents indicated a lack of social media usage by state dental boards. One respondent indicated use of Twitter by state dental boards while two others indicated use of the board's website for communication.

Incidents of online professionalism behavior came to the attention of the board in various ways with reporting by another dentist leading (n=8, 44%). Additionally, discovery during ongoing investigation of another complaint (n=5, 28%), reporting by patient, patient family member, or other member of the public (n=4, 22%), reporting by other non-dentist clinical provider (n=2, 11%) and reporting by non-clinical staff (n=1, 6%) were also ways in which online professionalism came to the attention of the board. No incidents of online professionalism behavior was reported (n=6, 33%) with (n=3, 17%) being uncertain. Table 3 indicates frequency of examples of online unprofessionalism that the board was made aware regarding dentists. The highest and most consistent frequency was online misrepresentations of credentials, clinical competencies or outcomes.

Actions to the reported behaviors included a variety of response. Summarized in Table 4 the leading action taken by the board included an informal warning (n=8, 44%) followed by issuing of consent order (n=3, 17%), formal disciplinary meeting (n=1, 6%) and consent agreement (n=1, 6%). Outcomes of these actions also varied. The highest outcomes reported were a letter of reprimand (n=4, 31%) (4/13) and ethics and professionalism refresher course/continuing education (n=3, 23%). Additional outcomes included assigned specific educational or community service (n=1, 8%), monetary fine (n=1, 8%), limitation or restriction of license (n=1, 8%), and temporary suspension of license (n=1, 8%).

In addition to dentists, similar incidents of online unprofessional behavior were reported among other professionals licensed by the board. The highest reported involvement of oral healthcare professionals aside from dentists included both dental hygienists and expand functions dental auxiliaries with (n=3, 38%) for each followed by certified dental assistants, dental radiographers (n=2, 25%) and dental therapists/mid-level providers (n=1, 13%).

Current impressions on online unprofessional behaviors and the handling of the board is summarized in Table 6. Each board was asked their level of agreement with the statement “Concerns about violating First Amendment rights would prohibit my board from taking action against dentists responsible for online unprofessional behavior.” The majority responded with uncertain (n=8, 47%) followed by disagree (n=5, 29%), agree (n=3, 18%) and strongly disagree (n=1, 6%). The overall level of concern about online activities by licensees that may be in violation of laws, rules and regulations of the state or the dental board reported highest with “somewhat concerned” (n=5, 31%) or

“moderately concerned” (n=5, 31%). Currently (n=15, 83%) report that the board does not have a policy specifically addressing issues of internet use and online unprofessional behavior and (n=18,100%) of the board response indicate there is no current development of a specific policy to address issue of internet use and online unprofessional behavior even though only (n=9, 50%) feel that given existing laws, rules and policies for the board’s jurisdiction, that the board would be able to effectively deal with issues of Internet uses and online unprofessional behavior.

Chapter 4: Discussion

While social media use is continually rising, the effects on licensed dental professionals are still being explored. This study represents baseline data in the area of state dental boards and the effects of social media on dental professionals. The survey completed by state dental board directors had a response rate of 34.6 percent. This response rate limits the generalizability of the study to apply to all state dental boards. While use of social media was only reported by one state dental board, it is evident that there are concerns with online unprofessionalism behaviors of licensed dental professionals and the strength of the current laws and rules of the individual board's to properly address. This report of social media use by state dental boards to communicate with licensees, patients or other parties was lower than that of the state medical boards by six percent.²

Overall the study on state dental boards produced like results to that of the state medical boards.² Similarly both boards reported a majority of uncertainty or no policy for Internet use by physicians or dentists, a lack of social media use by the board to communicate with physicians or patients and a level of concern about violations of online professionalism. While the state medical boards survey utilized vignettes to identify scenarios that would elicit investigation, our survey asked for frequency in which online professional behaviors occurred. The high consensus for investigation by state medical

boards matched the most reported behaviors that were seen by the dental boards including online violations of patient confidentiality, online misrepresentations, and inappropriate communication or contact with patients.² Consequences of the above actions were not discussed specifically in the study with state medical boards but it was found that there may be other legal consequences for violations of online professionalism including suspension or termination of employment based on an employer's policy.²

Beyond potential violations and consequences of the state dental board, it is the professional responsibility of dental professionals to follow the code of ethics both online and offline. The study with state medical boards mentions that patients could bring suit for violations of privacy under the Health Insurance Portability and Accountability Act that could be prosecuted by the Department of Health and Human Services.² Most social media sites have terms and conditions a user must accept prior to joining. Generally, this agreement states that social media sites own the data, though the content author may contain some rights.²⁷ In another study by Greyson, it was found that teachers and lawyers have been disciplined or fired for online behaviors that did not meet societal expectations of personal lives in a public world.²⁸ Dental professionals must be aware that their online content may be seen by all and can reflect the best and worst of the content. Ramifications for this content can vary based on the severity.

Despite the concern with online unprofessionalism and current laws, rules, and regulations to address issues, no boards reported currently creating social media policy. With the increase in social media use, dental boards should consider policy to protect employees, employers, patients, and the public. The reason for lack of social media use by state dental boards may be an area for future research. Perhaps dental boards do not

see a need for social media usage or there may be a discomfort with usage not knowing exact ramifications. From our study, it is evident that legal issues are easily identifiable and punishable where ethical issues may be more difficult to punish. Some ethical ramifications may be left more to the beholder based on current policy. Increasing awareness to state dental boards on the increase in social media use of the general population could promote future adoption of creating social media outlets to connect with professionals and the public. In a study of social media usage by students in US dental schools, students stated that online media is their primary source of information.”²⁹ Having state dental boards utilize social media sites could bridge the gap between professional and unprofessional behaviors. Dental boards could act as an example and resource of proper online professionalism for licensees to follow.

Future recommendations would include creation of state dental board social media policy. This policy could be similar to that of the American Dental Association which lists a posting protocol on their website. Focus is made on being professional, being respectful, maintaining confidentiality and privacy, respecting third party content, letting subject matter experts respond and add value, knowing that the internet is permanent, and separating personal views.³⁰ Policies created should reflect the well-being of all parties involved and be clear in violations of such policies. Additionally, state dental boards could require an ethics and professionalism continuing education course for each license renewal period. Currently, only six states require an ethics and professionalism course for dental hygiene license renewal. Other states allow ethics and professionalism courses to fulfill requirements of license renewal but do not mandate a specific ethics course.³¹ If states choose to adopt this suggestion, courses should be

evaluated to reflect current and up-to-date information including a segment for digital and social media. This uniformity allows licensed professionals who may hold multiple state licenses to follow the same rules regarding social media since social media shows no boundaries.

This study had several limitations. By sending the survey exclusively to state dental board executive directors, respondents may not have been qualified to answer the proposed questions. This is likely validated by the number of uncertain responses to the questions on the survey. One state dental board executive director commented that “many of the initial questions concern specific disciplinary actions against licensees in violation of unprofessional conduct and the internet...that information is handled by the board’s compliance unit.” Recognizing this limitation allows for future research to include enforcement officers or compliance units that have more involvement and investigation into online unprofessional complaints. This also was indicated in the study by state medical boards where one respondent specified that all complaints must be investigated and referred to a compliance unit as necessary.² Another limitation included no vignettes in the survey with state dental boards unlike the study with state medical boards. In future studies, vignettes could be used to show probable concern for investigation of pictures or comments posted on social media sites. With limited data from studies with dental boards and online unprofessionalism, comparisons to other medical and professional occupations are scarce. As more research continues, studies can further compare to medical and pharmacy boards to identify similarities and differences among online unprofessionalism.

Conclusion

While this study shows that state dental boards have limited use of social media, dental professionals have still been warned or penalized for online behaviors which violate dental practice acts or policies. Dental professions should be aware of their actions online to maintain the utmost respect for themselves, others and the profession. Dental boards are aware of potential online unprofessional behaviors and have implemented various consequences. Although no social media policy currently exists for state dental boards, continuous ethical and professional education should continue with emphasis on etiquette for online behavior.

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Appendix A. Tables

Table 1: State Dental Board Demographics (n=18)	
Demographic	n (%)
Primary Role at the Board	
Executive	14 (78%)
Licensing	1 (6%)
Investigations	1 (6%)
Other: Protection of the Public and Secretary	2 (11%)
Region	
Northeast	6 (33%)
South	4 (22%)
West	7 (39%)
Midwest	1 (6%)
Licensed Dentists in Jurisdiction	
≤ 1,000	2 (11%)
1,000-1,999	4 (22%)
2,000-2,999	3 (17%)
3,000-3,999	2 (11%)
4,000-4,999	0
≥ 5,000	7 (39%)
Public non-dental members	
None	3 (17%)
One	7 (39%)
Two	6 (33%)
Several public non-dental members that comprise 25% of the board	2 (11%)
Several public non-dental members that comprise 26%-50% of the board	0
Several public non-dental members that comprise over 50% of the board	0
Uncertain	0

Table 2: Social Media Use by State Dental Boards		
Question	Yes, n (%)	No or Uncertain, n (%)
Does the board uses social media for communication with licensees, patients or other parties? (n=18)	1 (6%)	17 (94%)
Which social media tools does the board use?	n(%)	
Facebook (n=3)	0	
Twitter (n=3)	1 (33%)	
Blogs (n=3)	0	
Pinterest (n=3)	0	
Instagram (n=3)	0	
YouTube (n=3)	0	
LinkedIn (n=3)	0	
Periscope (n=3)	0	
Other: Board Website (n=3)	2 (67%)	

Table 3: Frequencies of Online Unprofessional Behavior Reported for Dentists						
Behaviors	None	1-2	3-5	6-8	9>	Frequency Unknown
Failure to reveal conflicts of interest(online product endorsement without disclosure (n=18)	13	0	0	0	0	5
Online violations of patient confidentiality (n=18)	12	1	0	0	0	5
Online misrepresentations of credentials, clinical competencies, or outcomes (n=18)	4	2	3	2	3	4
Use of internet for inappropriate clinical practice (prescriptions, referrals, etc.) (n=18)	9	0	1	0	0	8
Discriminatory language or practices online (n=18)	12	0	0	0	0	6
Online depiction/description of intoxication or use of illicit substances by dentists (n=18)	11	0	0	0	0	7
Inappropriate communication or contact with patients online (sexual or other) (n=18)	11	2	1	0	0	4
Online disparaging or derogatory remarks about patients and/or their families (n=18)	13	1	0	0	0	4
Other (please specify online behavior and frequency) (n=7)	5	0	0	0	0	2

Table 4: Reporting and Disciplinary Actions for Dentists	
Survey Items and Response Categories	n (%)
How did incidents of online unprofessional behavior come to the attention of the board? (n=18)	
No incidents reported	6 (33%)
Discovered during ongoing investigation of another complaint	5 (28%)
Reported by another dentists	8 (44%)
Reported by other non-dentist clinical provider	2 (11%)
Reported by clinician in training	0
Reported by non-clinical staff	1 (6%)
Reported by patient, patient family member, or other member of the public	4 (22%)
Uncertain	3 (17%)
Other	0
Which of the following actions were taken by the board and/or its agents in response to incidents of online unprofessionalism? (n=18)	
No actions taken	8 (44%)
Informal warning (verbal or written communication)	8 (44%)
Formal disciplinary meeting	1 (6%)
Issuing of consent order	3 (17%)
Uncertain	4 (22%)
Other (consent agreement)	1 (6%)
What outcomes have occurred as a result of the actions taken by the board? (n=13)	
Letter of reprimand	4 (31%)
Assigned specific educational or community service requirements	1 (8%)
Monetary fine	1 (8%)
Limitation or restriction of license	1 (8%)
Temporary suspension of license	1 (8%)
Revocation of license	1 (8%)
Ethics and professionalism refresher course/continuing education	3 (23%)
Uncertain	5 (38%)
Other	3 (23%)

Table 5: Incidents of Online Unprofessional Behavior by Non-Dentists		
Question	Yes, n (%)	No or Uncertain, n (%)
Have similar incidents of online unprofessional behavior occurred among other professionals (i.e. non-dentists) licensed by the board? (n=17)	1 (6%)	16 (94%)
Which oral healthcare professionals aside from dentists in your jurisdiction have been involved in online violations of laws, rules or regulations? (n=8)		
Dental hygienists		3 (38%)
Expanded Functions Dental Auxiliary		3 (38%)
Certified Dental Assistant/Dental Radiographer		2 (25%)
Dental Therapist/Mid-level provider		1 (13%)

Table 6: State Dental Board Current Impression of Online Unprofessional Behaviors	
Survey Items and Response Categories	n (%)
Indicate the board's level of agreement with the following statement: "Concerns about violating first amendment rights would prohibit my board from taking action against dentists responsible for online unprofessional behavior. (n=17)	
Strongly Disagree	1 (6%)
Disagree	5 (29%)
Agree	3 (18%)
Strongly Agree	0
Uncertain	8 (47%)
Indicate your impression of the board's overall level of concern about online activities by licensees that may be in violation of laws, rules and regulations of the state or the dental board. (n=16)	
Not concerned	1 (6%)
Somewhat concerned	5 (31%)
Moderately concerned	5 (31%)
Concerned	3 (19%)
Very concerned	2 (13%)
Are the state's laws, rules and regulations broad enough to cover issues of Internet use and online behavior? (n=18)	
Yes	7 (39%)
No or Uncertain	11 (61%)
Does the board have policy specifically addressing issues of internet use and online unprofessional behavior? (n=18)	
Yes	0
No	15 (83%)
Uncertain	3 (17%)
Is the board currently developing a specific policy to address issues of internet use and online unprofessional behavior? (n=18)	
Yes	0
No	18 (100%)
Given existing laws, rules and policies for the board's jurisdiction, do you feel the board is able to effectively deal with issues of internet uses and online unprofessional behavior? (n=18)	
Yes	9 (50%)
No	1 (6%)
Uncertain	8 (44%)