

# Social Media Usage, Attitudes, Behaviour, and Perceptions of Online Professionalism in A Private Dental Institution

**Dr. Potta Sai Krishna**

Post Graduate, Public Health Dentistry, Anil Neerukonda Institute Of Dental Sciences

## **ABSTRACT:**

**Introduction:** Social media includes social networking platforms including Facebook and Twitter and media sharing sites, for example, YouTube and Instagram. Evidence suggests that social media is now used extensively by health professionals, with up to 90% of practicing doctors now reporting that they use Instagram accounts for professional or personal use. Aim: To examine attitudes towards professional behaviors on social media and online behavior amongst dental students in a private Dental institution

**Methodology:** This is a cross-sectional survey conducted using an online-based pre-structured questionnaire. Questions included were social media platform use, attitudes towards social media behaviors, and perceptions of a range of professional scenarios The target population were Final years BDS students, Interns, and Postgraduate students of a private dental college. The sampling method used was the convenience sampling method.

**Results:** The majority of students in the study reported using their real names on social platforms (n=167/191, 87%). Students were most likely to identify themselves as a dental student (n=173/191= 90%). One-third of students rated posting and anonymized dental procedures as unprofessional.

**Conclusion:** This study found widespread use of social media amongst students and awareness of the relationship between social media and professionalism. Most shared similar attitudes and avoided behaviors deemed unprofessional.

**Keywords:** Social media, Attitude, professionalism, behaviour

## **INTRODUCTION:**

One of the most effective tools for learning and communication in the modern era is social media (SM). We refer to web tools and various applications intended to improve communication, knowledge, and instantaneous information sharing as social media. These social networking sites allow users to share a variety of content, including texts, images, videos, audio files, and contacts <sup>(1)</sup>.

Social media includes social networking platforms including Facebook and Twitter and media sharing sites, for example, YouTube and Instagram. Evidence suggests that social media is now used extensively by health professionals, with up to 90% of practising doctors now reporting that they use INSTAGRAM accounts for professional or personal use. Ease of access and information content shared through social media platforms can generate professional and ethical challenges for healthcare professionals. For example, information shared on social media often includes personal information, views, and opinions.

This mix of information blurs the boundaries between personal and professional lives in a way that has the potential to harm the dentist-patient relationship <sup>(2)</sup>.

For healthcare workers, social media platforms' ease of access and information sharing can present ethical and professional dilemmas. For instance, information shared on social media frequently contains views, opinions, and personal information. The dentist-patient relationship may suffer as a result of this combination of information, which makes it harder to distinguish between personal and professional life <sup>(3)</sup>.

The General Dental Council's (GDC's) *Standards for the dental team*<sup>1</sup> set out nine principles which relate to aspects of professionalism, both organisational (for example, having an effective complaints procedure and maintaining and protecting patients' information) and personal (such as putting patients' interests first, effective communication and personal behaviour that maintains patients' confidence) <sup>(4)</sup>. Professionalism is important because how patients are treated, clinically and personally, affects the trust they have in their dental professionals and whether they return for continued care.

Guidance for professional behaviour focuses on developing and sustaining trust<sup>15</sup> and the latest update of the United Kingdom General Dental Council (GDC) Guidance on Social Media states that dental team members have a responsibility to “behave professionally and responsibly both online and offline”, including maintaining confidentiality, keeping appropriate boundaries with patients and complying with social media policies <sup>(5)</sup>.

The majority of medical students are reportedly aware of the professional risks associated with their personal conduct outside of the clinical setting; nonetheless, there seems to be a difference in how the online environment is viewed in comparison to other contexts. Because of their sense of anonymity, students believe they can “switch off” their professional identity outside of the clinical setting. Studies have also revealed that students may become disengaged and “disinhibited” when they use the internet. One of the most effective tools for learning and communication in the modern era is social media (SM). By social media, we mean online resources and various programs created to improve communication, knowledge acquisition, and real-time information sharing <sup>(6)</sup>.

Research indicates that a small percentage of students decide to make their Facebook profiles publicly accessible, frequently disclosing private information. Furthermore, some choose to share pictures of themselves and their students drinking excessive amounts of alcohol and getting wasted. Dental students' behaviors have not been the subject of many studies, but the literature suggests that many health and care students are dissatisfied with the content they find online. Research indicates that, among medical students, embarrassing Facebook photos are a common occurrence, and that nearly half of pharmacy students in the UK have uploaded content that they would prefer their future employers not to see. Health care workers may face ethical and professional dilemmas as a result of social media platforms' ease of access and information sharing <sup>(7,8)</sup>.

This evidence suggests that while students often adopt professional behaviours for daily interactions, many fail to do this with social media. There is a paucity of literature relating to dental professionalism online and few studies have examined dental students' online professional behaviours and their attitudes towards these behaviours. Therefore, this study aimed to examine attitudes towards professional behaviour on social media and online behaviour amongst dental students in a private dental college.

**AIM AND OBJECTIVES:****AIM OF THE STUDY:**

To examine attitudes towards professional behaviours on social media and online behaviour amongst dental students in a private Dental institution.

**OBJECTIVES:**

- To examine the attitudes of study population towards a range of online behavior.
- To assess the extent and nature of social media use and exposure to unprofessional behaviour in this cohort.

**METHODOLOGY****STUDY DESIGN:**

This is a cross-sectional survey conducted using an online based pre-structured questionnaire. Questions included were social media platform use, attitudes towards social media behaviours and perceptions of a range of professional scenarios. The target population were Final years BDS students, Interns, Postgraduate students of a private dental college. The sampling method used was convenience sampling method. Collection of data was done using google form by sending it to all the participants through e-mail. Questionnaire completion was voluntary and anonymous. Seven items were used for attitudes towards social media behaviours and 8 descriptive statements were used to assess perceptions of online behaviours of the students. Data were entered manually into SPSS by the researcher. Each questionnaire was numbered and data entry was verified at a later date by the same researcher. Social media use variables were collapsed into categories in response to the distribution of data. Descriptive statistics were used to explore data and chi-squared tests were used to explore relationships between variables.

**SAMPLE SIZE:**

Convenience Sampling (191 samples)

**SOURCE OF THE DATA:**

From a Private Dental Institution in Visakhapatnam

**INCLUSION CRITERIA:**

Participants who had given consent.

**TARGET POPULATION:** Final years, Interns, Postgraduate students

**COLLECTION OF DATA:** Google forms

**SAMPLE SIZE:**

Analysis: A priori: Compute required sample size

Input: Effect size  $w = 0.3$

$\alpha$  err prob = 0.05

Power ( $1 - \beta$  err prob) = 0.95

Df = 3

Output: Noncentrality parameter = 17.1900000

Critical  $\chi^2 = 7.8147279$

Total sample size = 191

Actual power = 0.9502399

Considering the effect size to be measured (d) at 0.3, power of the study at 95 % and the margin of the error at 0.05%, the total sample size is 191.

- The Statistical Analysis was done using SPSS v.26 software IBM., Corp.
- Data was entered in the excel spread sheet
- A descriptive analysis of the data was presented as frequency, by using Chi-Square test.
- The level of significance will be set at  $P < 0.05$ .

## STUDY DURATION

Two months

## ETHICAL CLEARANCE

Ethical approval for the study was obtained from the Institutional review board.

## OBSERVATION AND RESULTS

A total of 191 responses were received; a 100% response rate from the total cohort. All students reported using social media and the majority used more than one platform. Instagram was the most commonly used and was also the most regularly used among the platforms followed by youtube. Twitter was the least popular platform among the students. The majority of students in the study reported using their real name on social platforms ( $n=167/191$ , 87%). Students were most likely to identify themselves as a dental student ( $n=173/191=90\%$ ).

One third of students rated posting and anonymised dental procedures as unprofessional.

Half of the respondents indicated that interacting with staff and tutors on social media was unprofessional and a small number of students reported that they had done this.

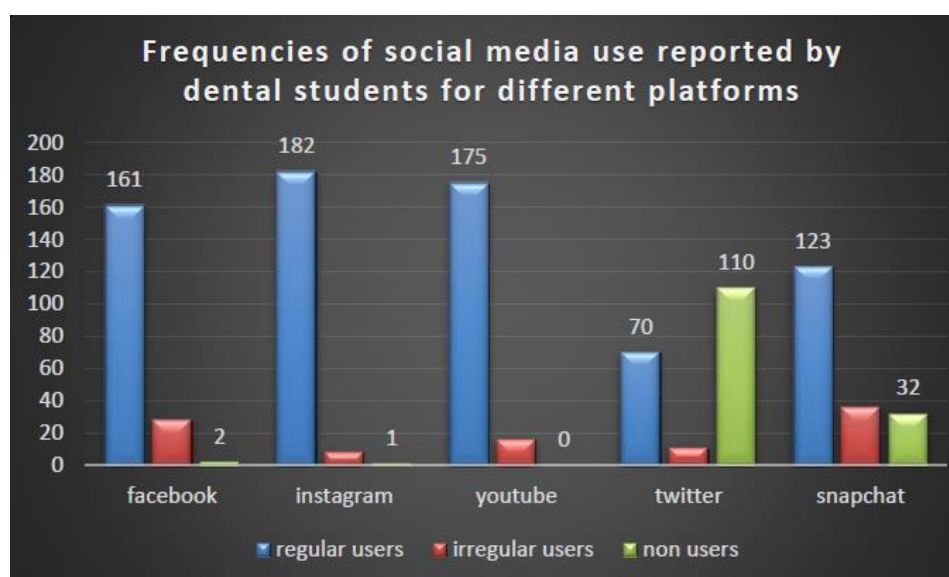
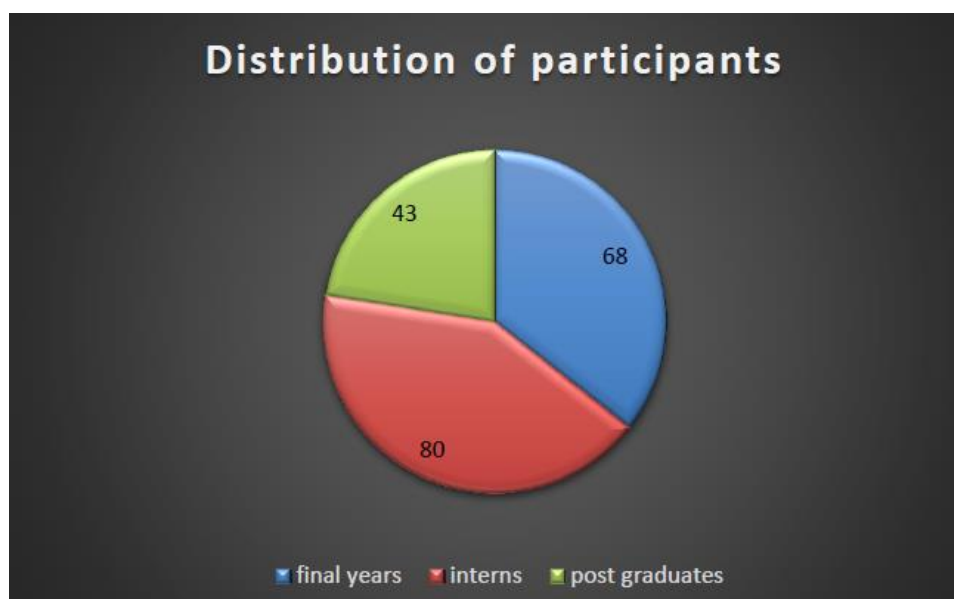


Figure 1: The proportion of students of students using different social media



**Figure 2: Showing the proportion of students**

**Table 1: Table showing the proportion of students agreeing and disagreeing with professionalism behaviour statements**

Sl.no	Question	Target Population	Options			p-value
			Disagree	Neutral	Agree	
1	What happens on social media is separate from what happens in a dental institution.	Final years	5 (7.3%)	43 (63.2%)	20 (29.4%)	p<0.05
		Interns	7 (8.7%)	28 (35%)	45 (56.2%)	
		Pg's	4 (9.3%)	8 (18.6%)	31 (72%)	
2	Dental student behaviour outside the Dental School can affect fitness to practise.	Final years	15 (22%)	18 (26.5%)	35 (51.5%)	p<0.05
		Interns	4 (5%)	35 (43.7%)	41 (51.2%)	
		Pg's	8 (18.6%)	12 (28%)	23 (53.4%)	

3	I am concerned about unprofessional content posted online	Final years	39 (57.3%)	20 (29.4%)	9 (13.2%)	p<0.05
		Interns	25 (31.2%)	37 (46.2%)	18 (22.5%)	
		Pg's	8 (18.6%)	15 (34.8%)	20 (46.5%)	
4	I am concerned that my online behaviour could affect my dental career	Final years	35 (51.4%)	25 (36.7%)	8 (11.7%)	p<0.05
		Interns	25 (31.2%)	33 (41.2%)	22 (27.5%)	
		Pg's	8 (18.6%)	10 (23.2%)	25 (58.1%)	
5	I am aware of the GDC guidelines on social media	Final years	46 (67.6%)	14 (20.5%)	8 (11.7%)	p<0.05
		Interns	21 (26.2%)	43 (53.7%)	16 (20%)	
		Pg's	3 (6.9%)	5 (11.6%)	35 (81.3%)	
6	The school places too much emphasis on professionalism.	Final years	6 (8.8%)	14 (20.5%)	48 (70.5%)	p<0.05
		Interns	11 (13%)	12(15%)	57 (71%)	
		Pg's	2 (4.6%)	9 (21%)	32 (74.4%)	
7	A patient who viewed my profile would question my professionalism.	Final years	23 (33.8%)	28 (41.1%)	17 (25%)	p<0.05
		Interns	21 (26.2%)	32 (40%)	27 (33.7%)	
		Pg's	3 (6.9%)	7 (16.2%)	33 (76.7%)	



**Table 2: Online behaviours tabulated by the proportion of students**

S.No	Question		Options			p-value
		Target population	rating this as unprofessional	who have done this	who have seen this	
1	Posts regarding anonymised dental procedures (eg 'I just completed my first filling')	Final years	4 (5.8%)	44 (64.7%)	20 (29.4%)	p<0.05
		Interns	6 (7.5%)	41 (51.2%)	33 (41.2%)	
		Pg's	23 (53.4%)	11 (25.5%)	9 (21%)	
2	Interaction with clinical staff and tutors via social media	Final years	35 (51.4%)	18 (26.4%)	15 (22%)	p<0.05
		Interns	40 (50%)	28 (35%)	12 (15%)	
		Pg's	15 (34.8%)	23 (53.5%)	5 (11.6%)	
3	Using closed/private groups to discuss patients	Final years	7 (10.2%)	25 (36.7%)	36 (52.9%)	p<0.05
		Interns	9 (11.2%)	47 (58.7%)	24 (30%)	
		Pg's	1 (2.3%)	34 (79%)	8 (18.6%)	
4	Using closed/private groups to discuss members of staff/other students	Final years	10 (14.7%)	24 (35.2%)	34 (50%)	p<0.05
		Interns	11 (13.7%)	43 (53.7%)	26 (32.5%)	
		Pg's	4 (9.3%)	33 (76.7%)	6 (13.9%)	

5	Using open/public groups to discuss patients	Final years	36 (52.9%)	25 (36.7%)	7 (10.2%)	p<0.05
		Interns	24 (30%)	47 (58.7%)	9 (11.2%)	
		Pg's	8 (18.6%)	34 (79%)	1 (2.3%)	
6	Using open/public groups to discuss members of staff/other students	Final years	34 (50%)	24 (35.2%)	10 (14.7%)	p<0.05
		Interns	26 (32.5%)	43 (53.7%)	11 (13.7%)	
		Pg's	6 (13.9%)	33 (76.7%)	4 (9.3%)	
7	Interaction with patients via social media	Final years	32 (47%)	19 (28%)	17 (25%)	p<0.05
		Interns	53 (66.2%)	10 (12.5%)	17 (21.2%)	
		Pg's	32 (74.4%)	3 (6.9%)	8 (18.6%)	
8	Made negative comments relating to people's characteristics (eg Gender race disability)	Final years	60 (88.2%)	0 (0%)	8 (11.7%)	p<0.05
		Interns	77 (96.2%)	0 (0%)	3 (3.7%)	
		Pg's	42 (97.6%)	0 (0%)	1 (2.3%)	

## DISCUSSION:

This study found that all dental students at the private dental college were using social media, with 95% using Instagram daily. This widespread use of social media replicates findings in other studies of health professionals.

The findings of this study reflect the widespread use of smartphones amongst young adults, as most access platforms such as Facebook and Instagram through their mobile phones. It is also likely that use reflects patterns of adoption of new technologies.

This study found that students were aware that their social media profile could affect their fitness to practice and most reported being aware of School fitness to practice procedures.



All dental professionals should adhere to the guidelines established by the GDC regarding social media usage and digital professionalism. The study's participants were certain that their social media personas were suitable. When they qualified, the majority of students intended to review or edit their profiles, which may indicate a sense of increased exposure and personal responsibility. It might also imply that you, as a student, felt that you should behave differently online <sup>(9)</sup>.

Instagram and YouTube are catching up fast, with their popularity growing rapidly among teenagers and young adults. Instagram is based on fast visual exchange, and because the “older” generation of SM users has not caught on as much as the “younger” users, it is a preferred SM platform for non-professional interaction <sup>(10)</sup>.

Behaviors and posts on SM that were considered unprofessional by our respondents were in line with previous research. Dental professionals and practices post and share patients' photos and video material on SM as part of marketing activities (“before and after shots”), educational materials, and professional self-promotion <sup>(11)</sup>.

In this study postgraduate students are more concerned about unprofessional content posted online than final-year students, which shows showing postgraduates are more professional.

Student-patient interactions are especially problematic as students are not yet professionals, but should abide by the same ethical and professional rules as graduated doctors of dental medicine. In traditional relations, a professional separation between doctors and patients is more easily maintained, whereas on SM this border can be vague <sup>(12)</sup>.

GDC Standards and guidance have described issues of patient confidentiality and content in relation to social media and most students were felt online discussions relating to patients, staff or students were inappropriate. However, some felt these discussions were acceptable in closed groups (with security settings to limit access to discussions) and a small number found this acceptable in open groups <sup>(13,14)</sup>.

According to the current study, postgraduate students know more about the GDC guidelines than interns (16%), final years (81.7%), and 35 (81.3%). This indicates that final-year students are not very aware of this.

Since closed groups provide a sense of security, people may disclose and share more information there, but because of the way social media is used, information shared there may not actually be private. While 75% of students had restricted access to their online profiles, more than half let strangers view their photos, according to research by Henry and Molnar <sup>(15)</sup>.

The ability to take screenshots of any information published online and information storage sites pose additional privacy risks. This could imply that, in spite of security settings, content on the internet is frequently accessible and shareable. Therefore, the study's findings imply that some students, especially those in closed groups, might be more likely to act inappropriately online out of a sense of security.

In public or private settings, talking about patients or employees without permission or complete anonymity is generally regarded as improper for professionals. Only a small percentage of students—25 (36.7%) in their final year, 47 (58.7%) interns, and 34 (79%) postgraduate students—agreed and did not think these behaviors were unprofessional. This result is consistent with other research showing that students' perceptions of appropriate behavior differed significantly from those of the staff and the general public <sup>(16)</sup>.

It therefore appears that most students are aware of and take action to ensure that they behave appropriately online but students may witness many lapses in professional behaviour. As most students appear able to identify inappropriate online behaviour, it may be possible for them to take action to alert

their peers when they feel they are behaving inappropriately. This was not tested within the context of this study but may be an area for further research.

Snapchat as an SM platform that deletes posted content after it was visible for a short period of time by two directly connected users, greatly limits the possibility to disseminate unprofessional behavior to broader audience.

Besides, Snapchat and TikTok are mostly used by adolescents, hence they were not of interest to us. 23-24. Interaction with patients via social media felt unprofessional among which final years 32(47%), Interns 53(66.2%), postgraduates 32(74.4%). Made negative comments relating to people's characteristics (eg Gender race disability) felt unprofessional final years 60(88.2%), postgraduates 42(97.6%), interns 77 (96.2%).

There were several limitations to this study despite the fact that it offered comprehensive details regarding the reported behaviors of the students. This was based on self-report and recollection at a specific moment in time. Although the data was collected anonymously, bias may have emerged due to social acceptability and reporting bias. These are delicate and significant issues that have implications for students' fitness to practice. The number of students exposed to particular behaviors was also counted in this study, but the study did not look into the frequency, location, or timing of inappropriate social behaviors. The fact that only one dental school offering instruction in this field was included in the study may have further restricted the findings' applicability.

## CONCLUSION:

In conclusion, this study found widespread use of social media amongst students and awareness of the relationship between social media and professionalism. Most shared similar attitudes and avoided behaviors deemed unprofessional. Results suggested a greater perception of safety when behaviors deemed to be inappropriate were within closed groups. A small number of students admitted to behaviors commonly considered inappropriate and nearly all students had been exposed to behaviors deemed as inappropriate whilst being online. This suggests that some dental students may not be behaving appropriately on social media and may be putting their careers at risk. This study highlights the need for social media training for all dental undergraduates, as social media use is widespread. This training should include awareness and practical training in using professional standards, selecting appropriate behaviors, and managing professional risks online. It is recommended that further work is undertaken to explore the gaps between knowledge of appropriate professional behavior online, online risks, and actual behavior to inform this training. Furthermore, additional work is also needed to examine the most effective way of teaching students to remain professional online.

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