

# Effects of social media on cognitive behavior among dental graduates

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## ABSTRACT

Social media have permeated all generation of internet users becoming a prominent communication tool, particularly in student community. Thus, the students are increasingly using the social networking sites (SNS) such as Facebook, Whatsapp, and Twitter. This has led to rise in questions about its impact on academic performance and cognitive behavior. It has been found that SNS decreases both efficiency and productivity. This survey is conducted to learn more about the impact of social media on academic performance. The main aim of this survey is to evaluate the effects of social media on cognitive behavior among dental graduates.

**Keywords:** Social media, internet, whatsapp, facebook, addiction

## Introduction

The purpose of the research was to investigate the impact of Facebook, Whatsapp, Twitter, and other social media usage on the cognitive behavior of dental graduates. Many people have begun using the internet to create and maintain social relationships through online profiles, the gathering of online friends, commenting on friends' website pages, and the monitoring of the online status of others.<sup>[1-4]</sup> Conceived as a tool to aid social interaction in our ever-growing, busy, and transient lives, "connecting" through social media is generally considered a fun and harmless pastime.<sup>[5]</sup> The development and evolution of social media technologies, however, have become synonymous with advocacy, exposure, and organizing mass movements. The latest statistics show that around 42% of online adults use multiple social networking sites (SNS).<sup>[6]</sup> Perhaps not surprisingly, the majority of social media users are under the age of 30. One of the main attractions for connecting to the internet was, and still is, the ability to better connect with the world around us. Social networks have become the central facilitators for daily communication

with peers, family, and acquaintances. For centuries, humans have communicated with each other face-to-face, in different languages and dialects. As we grow up, we develop certain skills that allow us to relate and communicate with each other. In the past few years, social media have taken over the way we communicate.<sup>[7]</sup>

Email, instant messaging, and social networking have become common day-to-day communication tools among society. Instead of talking, looking at each other, while being at the same physical place, we seem to be spending much more time communicating behind a keyboard.<sup>[8]</sup>

## Need for Study

Engaging in various forms of social media is a routine activity that research has shown to benefit children and adolescents by enhancing communication, social connection, and even technical skills. During the past 5 years, the number of preadolescents and adolescents using such sites has increased dramatically.<sup>[9]</sup>

According to a recent poll, 22% of teenagers log on to their favorite social media site more than 10 times a day, and more than half of adolescents log on to a social media site more than once a day.<sup>[9]</sup> 75% of teenagers now own cell phones, and 25% use them for social media, 54% use them for texting, and 24% use them for instant messaging.<sup>[10]</sup> This excessive use of social networking site is believed to have its effects on cognitive behavior among the users. In this survey which is administered to dental graduates, questions were asked about their social media habits.<sup>[11]</sup> It explored how students saw the

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Table 1: Questionnaire's content

How many SNS have you been using?	1 15%	2 50%	More than 2 35%
How long have you been using them?	Days	Months	Years 100%
How long you use them each day?	1 h 23%	2–3 h 34%	More than 3 h 43%
Are they beneficial in education?	Agree 47%	Disagree 53%	
Do you think they are important?	Agree 28%	Disagree 53%	May be 19%
Do you feel your addicted it?	Agree 61%	Disagree 39%	
Do you feel isolated from your family?	Agree 34%	Disagree 66%	
Is SNS interfering with your education?	Agree 58%	Disagree 42%	
Do you feel your analytical thinking has reduced?	Agree 36%	Disagree 64%	
What might be the ways to improve your analytical thinking?	Puzzles 60%	Quizzes 40%	
Do you feel this has decreased your ability to solve problem?	Agree 30%	Disagree 70%	
Do you feel isolated from your family?	Agree	Disagree	
While sharing your problem, you depend on	Social media 15%	Family members 85%	
Do you feel the use of SNS has reduced ur responsiveness to situations?	Agree 32%	Disagree 68%	
Do you feel your quality time has been spent purposelessly?	Agree 43%	Disagree 57%	
Is it possible for you to be without SNS at least for a day?	Possible 56%	Impossible 44%	
Purpose of using social media	To make friends 28%	Chatting 32%	Educational purpose 40%
What are the other fields you feel yo could spend time at?	Playing games 43%	Reading books 36%	Interpersonal relationship 21%

SNS: Social networking sites

role of social media in their personal lives, education, and create and maintain relationships.<sup>[8]</sup>

## Subjects and Methods

This is a prospective cohort study of 50 dental graduates about the effects of social media on cognitive behavior using a self-administered questionnaire. They were selected as a reflection of general population.

The subjects were interviewed regarding the usage of various SNS, the time spent, purpose of usage, its effects on education, analytical thinking, responsiveness to situations, and the level addiction.<sup>[12]</sup> This questionnaire mainly ascertains the response of the dental graduates to the social media and the balance that they strike between SNS and personal life. The questionnaire was in English. A 20 item questionnaire, each item having agree, disagree, and may be options.<sup>[13]</sup>

## Discussion

About 100% of the subjects have been using SNS. This has led to the conclusion that social media is well used among dental graduates.

Nearly, 85% of the subjects are part of two and more SNS spending approximately 2–3 h per day.

About 53% of graduates have felt that the SNS are less beneficial and important in education and 61% of them are believed to be addicted toward it which indirectly has its adverse effects on education.<sup>[14]</sup> The level of addiction is so high that it is impossible for 57% of the subjects to be without SNS even for a day. However, nearly, 60% of the subjects feel that their analytical thinking and ability to solve problems remain unaltered. 85% of the subjects are believed to share their problems with family members.<sup>[15-16]</sup>

About 43% of them agree that their precious time has been spent purposeless which otherwise could be used for reading books, playing games, having interpersonal relationships with people, and so on.

## Conclusion

The study aimed to assess the impact of Facebook and other social media on dental graduates. This study aimed to fill a gap by focusing on the impact of the intensity of social media usage. Although in some cases, it had adverse impact on the subject's personal life

and education; in certain cases such as analytical thinking and responsiveness to situations, it had minimal impact.

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