

## Social Media Use among Adolescents in North Dakota, USA

**Toyosi Motilola Olola**

University of North Dakota, Grand Forks, USA

### Abstract

*The study investigated the use of social media among adolescents in North Dakota. Specifically, the study sought to determine the prominent social media used by adolescents in North Dakota; and the extent to which adolescents used social media in North Dakota State. The study adopted a descriptive survey research design. The sample for the study consisted of two hundred (200) adolescents that were randomly selected using a simple random sampling technique. One research instrument tagged "Adolescents Social Media Questionnaire" (ASMQ) was used to collect data for the study. Data collected were analyzed using frequency counts and simple percentages. Results of the study showed that Snapchat, TikTok, Facebook, Instagram, YouTube, and Twitter are the prominent social media used by adolescents at above 70.0% in North Dakota State. Results of the study also revealed that the level of adolescents who use social media is high at 60.5% in North Dakota. The study concluded that Snapchat, TikTok, Facebook, Instagram, YouTube, and Twitter are the prominent social media used by adolescents and that the level to which adolescents use social media is high in North Dakota.*

### Keywords

social media; adolescents; use; online; communication



### I. Introduction

Adolescents now use social media far more often than they did in the past. They nowadays have a bigger internet presence than ever before. This lately expanded significantly (Leong et al., 2019; Kemp, 2020). Online resources and web-based programmes known as "social media" give users the chance to exchange information, ideas, and interests in order to promote user interactions (Swar and Hameed, 2017). People utilise social media for a variety of purposes, such as communication, entertainment, and information gathering. Notably, teens and young adults spend more time on social media, e-games, online networking sites, and texting (Twenge and Campbell, 2019). The types of group contact and the individual and collective behaviour of social media users throughout the world may have changed, according to some scholars (Dhir et al., 2018; Tateno et al., 2019).

Consequently, there are increased concerns regarding the possible negative impacts of social media usage addiction (Kircaburun et al., 2020) and psychological well-being (Jiao et al., 2017; Choi and Noh, 2019; Chatterjee, 2020). Smartphones sometimes distract their users from relationships and social interaction (Li et al., 2020a), and several authors have stressed that the excessive use of social media may lead to smartphone addiction (Leon et al., 2019), majorly based on the fear of missing out (Roberts and David, 2020). The use of social media has been related to anxiety, loneliness, depression (Reer et al., 2019), social isolation (Whaite et al., 2018), as well as phubbing, which means the extent to which an individual uses, or is

distracted by, their smartphone during face-to-face communication with others (Choi and Noh, 2019; Chatterjee, 2020).

However, the use of social media also contributes to building a sense of connectedness with others (Twenge and Campbell, 2019), which may decrease social isolation. Undeniably, social media provides several ways to interact with close ties, such as family, friends, and relatives, and weak links, including co-workers, acquaintances, and strangers (Chen and Li, 2017). Also, it plays a key role among people of all ages as they exploit their sense of belonging in different communities (Roberts and David, 2020).

Consequently, despite the fears regarding the possible negative impacts of social media usage on well-being, there is also an increasing number of studies highlighting the use of social media as a new communication channel (Barbosa et al., 2020), underlining that it can play a decisive role in developing one's presence, identity, and status, and as such facilitating social interaction, forming and maintaining relationships, and sharing ideas, which accordingly may be notably correlated to social support (Holliman et al., 2021).

Remarkably, recent studies have suggested that the impact of smartphone usage on psychological well-being depends on the time spent on each type of application and the activities that users engage in (David et al. 2018; Bano et al., 2019; Barbosa et al., 2020). Much work is yet to be done on the level of the use of social media in society. There is, therefore, the need to investigate the use of social media among adolescents in North Dakota State.

Media technology has tremendously had a significant influence on the way people communicate daily across the globe. The rising dimension of social media use among today's youth cannot be overemphasized. As such, social networking among students has become more and more popular. Social media is a way that helps people feel they belong to a community (Osadola et al, 2022). Despite the vital role of social media in society, adolescents abuse its use in one way or another. Therefore, the need to investigate the use of social media among adolescents in North Dakota becomes imperative.

The study adopted a descriptive survey research design. The study population comprised adolescents. The sample for the study consisted of two hundred (200) adolescents that were randomly selected using a simple random sampling technique. One research instrument tagged "Adolescents Social Media Questionnaire" (ASMQ) was used to collect data for the study. The instrument has three sections. Section A contained items on the socio-demographic information of the respondents; Section B contained nine items on the various social media used by the respondents based on "Yes" and "No"; and Section C contained ten items on the level at which the respondents used social media based on the projective rating scale of "Always", "Sometimes" and "Never". Data collected after the administration of the instrument were analyzed using frequency counts and simple percentages.

The survey would offer useful information on the popular social media platforms utilised and the proportion of adolescents using social media in North Dakota. The study will assist parents and educators in making sure that their charges are properly watched over in terms of their usage of social media. People will become more aware of the use of social media and information and communication technologies according to the study's findings. The study's results have in fact pushed the boundaries of knowledge and provided inspiration for more research.

## II. Review of Literature

### 2.1 Social Media Engagement Theory

Social Media Engagement (SME) theory accounts for the role of technology as the underlying platform needed to facilitate social interactions among globally and temporally distributed users. Clearly, the rise of social media comes mainly from the evolution of technology to provide a unique user experience that enables users to connect in new ways that were never before possible. The central premise of SME theory is that higher user engagement leads to greater usage of the social media platform. Usage is defined as the frequency of a user's contribution, retrieval, and/or exploration of content within a social media site (Kankanhalli, Tan, & Wei, 2005; Li & Bernoff, 2008). The more *frequently* users take part in a variety of activities, the more valuable the social media platform becomes to the organization and fellow users, resulting in the co-creation of value (Kankanhalli, et al., 2005; Li & Bernoff, 2008).

### 2.2 Understanding Social Media

Social media is defined in a different background from the beginning of this technology. It is difficult to provide a single definition incorporating all the technology and practices related to social media, partly because the technology is not limited by any specific scope, format, topic, audience, or source (Treem et al., 2016). Appel et al. (2020) described social media as a technology-based system that is not entirely technological and in which a variety of interconnected actors, including individuals, businesses, organizations, and institutions, can engage in a variety of complex and varied behaviors, interactions, and exchanges. In addition, Kaplan and Haenlein. (2010) defined Social media as “a group of Internet-based applications that builds on the ideological and technological foundations of Web 2.0 and allows the creation and exchange of user-generated content”. In terms of marketing, Cheung et al. (2020) described social media as a web tool used to create content tailored for each social media platform to increase interaction and advance business.

Consequently, social media can be defined from different aspects of present digital life apart from online communication, from marketing to politics to education to health to essential human interaction (Bashir & Bhat, 2016). Building on these preexisting definitions and the concept to which this literature is tilted, we define social media as software-based digital technologies that typically take the shape of applications and websites and provide users the ability to communicate and receive digital content, including images, texts, videos, and other types of media content. A few examples of these apps are Facebook, Instagram, Twitter, Snapchat, and Tiktok. Snapchat social media app is one of the most popular online activities, with approximately 4.6 billion people using the various platforms in 2022 and a worldwide consumption time of 147 min per day. Also, 2 million Snapchat messages are sent per minute (Statista, 2022).

### III. Results and Discussion

#### 3.1 Results

##### a. Analysis

**Table 1.** Descriptive Analysis of Socio-Demographic Information of the Respondents in North Dakota State

S/N	Variables	Frequency (f)	Percentage (%)	
1.	Sex	Male	89	44.5
		Female	111	55.5
2.	Age Bracket	<15 years	64	32.0
		15 years	25	12.5
		>15 years	111	55.5

**N = 200**

Results in Table 1 showed the descriptive analysis of socio-demographic information of the respondents in North Dakota State. It can be gathered from the Table that 44.5% of the respondents are males while 55.5% are females even, as 32.0%, 12.5%, and 55.5% are in the age brackets of less than 15 years, 15 years, and above 15 years respectively in the study area.

#### 1. Research Question One

What are the prominent social media used by adolescents in North Dakota State?

Data collected on the various social media used by adolescents were subjected to descriptive analysis of frequency and percentage to answer this research question. The results are presented in Table 2.

**Table 2.** Descriptive Analysis of the Prominent Social Media Used by Adolescents in North Dakota State

S/N	Social media	Frequency (f)	Percentage (%)	Rank
1.	Snapchat	174	87.0	6 <sup>th</sup>
2.	WhatsApp	195	97.5	2 <sup>nd</sup>
3.	TikTok	159	79.5	7 <sup>th</sup>
4.	Facebook	200	100.0	1 <sup>st</sup>
5.	Instagram	180	90.0	4 <sup>th</sup>
6.	You Tube	178	89.0	5 <sup>th</sup>
7.	Twitter	192	96.0	3 <sup>rd</sup>

**N = 200**

Results in Table 2 showed the descriptive analysis of the prominent social media used by adolescents in North Dakota State. It can be deduced from the Table that Snapchat, Whatsapp, TikTok, Facebook, Instagram, You Tube and Twitter at 87.0%, 97.5%, 79.5%, 100.0%, 90.0%, 89.0% and 96.0% respectively are the prominent social media used by the adolescents in North Dakota.

## 2. Research Question Two

What is the level of adolescent usage of social media in North Dakota?

To answer this research question, data collected on the ten items of the level at which adolescents used social media in the study area were scored such that the “Always” response was allotted ‘3’, “Sometimes” response was allocated ‘2’ and “Never” response was assigned ‘1’. The instrument has ten items that were used to measure the level at which adolescents used social media in the study area. Responses from individuals to each item were computed, and as such, the minimum and maximum scores obtained on this scale were 10 and 30, respectively. The level at which adolescents used social media scores in the range of 10-14 were adjudged as having “Low Level”. The level at which adolescents used social media scores in the range of 15-20 were adjudged as having “Moderate Level”. The level at which adolescents used social media scores in the range of 21-30 was adjudged as having a “High Level”. The summary of the results is presented in Table 3.

**Table 3.** Descriptive Analysis of the Level to which Adolescents Used Social Media in the North Dakota States

S/N	Quality	Frequency (f)	Percentage (%)
1.	Low Level	17	8.5
2.	Moderate Level	62	31.0
3.	High Level	121	60.5
<b>Total</b>		<b>200</b>	<b>100.0</b>

**N = 200**

Results in Table 3 showed the descriptive analysis of the level to which adolescents used social media in North Dakota State. From the Table, it can be observed that the level at which adolescents use social media is high at 60.5% in North Dakota.

## 3.2 Discussion

According to the results of the survey, the most popular forms of social media among adolescents in North Dakota are Instagram, TikTok, WhatsApp, Facebook, Yahoo Messenger, E-mail, and YouTube. The findings of Owusu-Acheaw and Larson (2015), who performed research on the usage of social media and its influence on the academic performance of students attending higher institutions in Ghana, were validated by the findings of this investigation. They said that Facebook, Skype, Twitter, and WhatsApp are the most popular social media platforms utilised by students attending higher institutions in the region under investigation. The findings of the survey also showed that a significant number of adolescents in the state of North Dakota make use of various forms of social media. This data lends credence to the conclusions reached by Twenge and Campbell (2019), who discovered that young people spend a greater amount of time on social media.

## V. Conclusion

According to the findings of the study, the most popular forms of social media among adolescents are Snapchat, Whatsapp, TikTok, Facebook, Instagram, You Tube, and Twitter. Additionally, the study found that the degree to which adolescents use social media is high in the state of North Dakota.

## Recommendations

Based on the findings of the study, the following recommendations were raised.

1. Individuals should ensure that the use of social media is not abused.
2. Parents should ensure that their wards are appropriately monitored as far as the use of social media is concerned.
3. There should be appropriate sensitization for individuals on the usage of social media as well as information and communication technology.
4. The researcher also recommended that adolescents should not be addicted to social media.

## References

- Bano, S., Cisheng, W., Khan, A. N., and Khan, N. A. (2019). WhatsApp use and student's psychological well-being: role of social capital and social integration. *Child. Youth Serv. Rev.* 103, 200–208. doi: 10.1016/j.chilyouth.2019.06.002.
- Barbosa, B., Chkoniya, V., Simoes, D., Filipe, S., and Santos, C. A. (2020). Always connected: generation Y smartphone use and social capital. *Rev. Ibérica Sist. Tecnol. Inf.* E35, 152– 166.
- Chatterjee, S. (2020). Antecedents of phubbing: from technological and psychological perspectives. *J. Syst. Inf. Technol.* 22, 161–118. doi: 10.1108/JSIT-05-2019-0089.
- Chen, H. T., and Li, X. (2017). The contribution of mobile social media to social capital and psychological well-being: examining the role of communicative use, friending and self-disclosure. *Comput. Hum. Behav.* 75, 958–965. doi: 10.1016/j.chb.2017.06.011.
- Choi, D.H., and Noh, G. Y. (2019). The influence of social media use on attitude toward suicide through psychological well-being, social isolation, and social support. *Inf. Commun. Soc.* 23, 1–17. doi: 10.1080/1369118X.2019.1574860.
- David, M. E., Roberts, J. A., and Christenson, B. (2018). Too much of a good thing: investigating the association between actual smartphone use and individual well-being. *Int. J. Hum. Comput. Interact.* 34, 265–275. doi: 10.1080/10447318.2017.1349250.
- Dhir, A., Yossatorn, Y., Kaur, P., and Chen, S. (2018). Online social media fatigue and psychological wellbeing—a study of compulsive use, fear of missing out, fatigue, anxiety and depression. *Int. J. Inf. Manag.* 40, 141–152. doi: 10.1016/j.ijinfomgt.2018.01.012.
- Holliman, A. J., Waldeck, D., Jay, B., Murphy, S., Atkinson, E., Collie, R. J. (2021). Adaptability and social support: examining links with psychological wellbeing among UK students and non-students. *Fron. Psychol.* 12:636520. doi: 10.3389/fpsyg.2021.636520.
- Jiao, Y., Jo, M. S., and Sarigöllü, E. (2017). Social value and content value in social media: two paths to psychological well-being. *J. Org. Comput. Electr. Commer.* 27, 3–24. doi: 10.1080/10919392.
- Kankanhalli, A., Tan, B. C. Y., & Wei, K. K. (2005). Contributing knowledge to electronic knowledge repositories: An empirical investigation. *MIS Quarterly*, 29(1), 113-143.
- Kircaburun, K., Alhabash, S., Tosunta, S. B., and Griffiths, M. D. (2020). Uses and gratifications of problematic social media use among University students: a simultaneous examination of the big five of personality traits, social media platforms, and social media use motives. *Int. J. Mental Health Addict.* 18, 525–547. doi: 10.1007/s11469-018-9940-6.

- Leong, L. Y., Hew, T. S., Ooi, K. B., Lee, V. H., and Hew, J. J. (2019). A hybrid SEM-neural network analysis of social media addiction. *Expert Syst. Appl.* 133, 296–316. doi: 10.1016/j.eswa.2019.05.024.
- Li, C., & Bernoff, J. (2008). *Groundswell: Winning in a world transformed by social technologies*. Boston, MA: Harvard Business School Press.
- Li, L., Griffiths, M. D., Mei, S., and Niu, Z. (2020a). Fear of missing out and smartphone addiction mediates the relationship between positive and negative affect and sleep quality among Chinese University students. *Front. Psychiatr.* 11:877. doi: 10.3389/fpsy.2020.00877.
- Osadola, O. S., Oyewumi, F. O. and Osadola, I. O (2022) “Women and Mass Media Development in the 21st Century: Viz A Viz”. *SIASAT*, Vol. 7, no. 3, pp. 211-24, doi:10.33258/siasat.v7i3.125.
- Owusu-Acheaw, M. and Larson, A. G. (2015). Use of social media and its impact on academic performance of tertiary institution students: A study of students of Koforidua Polytechnic, Ghana. *Journal of Education and Practice*, 6(6).
- Reer, F., Tang, W. Y., and Quandt, T. (2019). The mediating roles of social comparison orientation and fear of missing out are psychosocial well-being and social media engagement. *New Media Soc.* 21, 1486–1505. DOI: 10.1177/1461444818823719.
- Roberts, J. A., and David, M. E. (2020). The social media party: fear of missing out (FoMO), social media intensity, connection, and well-being. *Int. J. Hum. Comput. Interact.* 36, 386–392.
- Swar, B., and Hameed, T. (2017). “Fear of missing out, social media engagement, smartphone addiction and distraction: moderating role of self-help mobile apps-based interventions in the youth,” Paper presented at the 10th International Conference on Health Informatics (Porto).
- Tateno, M., Teo, A. R., Ukai, W., Kanazawa, J., Katsuki, R., Kubo, H., et al. (2019). Internet addiction, smartphone addiction, and hikikomori trait in Japanese young adult: social isolation and social network. *Front. Psychiatry* 10:455. doi: 10.3389/fpsy.2019.00455.
- Twenge, J. M., and Campbell, W. K. (2019). Media use is linked to lower psychological well-being: evidence from three datasets. *Psychiatr. Q.* 90, 311–331. doi: 10.1007/s11126-019-09630-7.
- Whaite, E. O., Shensa, A., Sidani, J. E., Colditz, J. B., and Primack, B. A. (2018). Social media use, personality characteristics, and social isolation among young adults in the United States. *Pers. Individ. Differ.* 124, 45–50. doi: 10.1016/j.paid.2017.10.030.