

---

## The impact of social media outages on Ghanaian users: A snapshot of the October 2021 Facebook outage event

Emmanuel Keku<sup>1\*</sup>, Elaine Patterson<sup>2</sup>

<sup>1</sup>Department of Actuarial and Statistics, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.

[ekekuinchrist247@gmail.com](mailto:ekekuinchrist247@gmail.com)

<sup>2</sup>Nursing Programs, Ramapo College of New Jersey, USA. [profelaine@aol.com](mailto:profelaine@aol.com)

\*Corresponding author: [ekekuinchrist247@gmail.com](mailto:ekekuinchrist247@gmail.com)

---

### 1. Introduction

The world would not have become a global village without social media (SM), (Forgeard, 2021). Social media is an internet-based communication that allows billions of people to exchange information and communicate with one another, gain new skills, broaden their knowledge, and engage with their audience/customers (Endo et al., 2017; Lutkevich, 2021; Dollarhide, 2021; Moosa, 2022). Researchers (Endo et al., 2017; Memon et al., 2018; Vidal et al., 2020) have discovered a strong link between excessive social media use and an increased risk of loneliness, anxiety, self-harm, sadness, and even suicidal thoughts in spite of the obvious benefits of social media use.

At 15:39 UTC on October 4, 2021, the social media network "Facebook" and its subsidiaries Messenger, Mapillary, WhatsApp, Instagram, and Oculus were inaccessible worldwide for six to seven hours (Madory, 2021; Lawler & Heath, 2021). Additionally, anyone attempting to log in using Facebook was unable to access third-party websites (Maier, 2022). In light of this, the goal of this paper is to briefly describe and document how the Facebook Outage Event in October 2021 affected Ghanaian social media users.

According to Isaac and Frenkel (2021), many people's lives were disrupted. Companies were cut off from clients as applications used by billions of people globally went down. Although technological hitches happen often, the simultaneous loss of so many apps from the biggest social media company in the world was a first of its kind (Isaac & Frenkel, 2021).

### 2. Study setting and social media usage – An overview

This work was carried out in Ghana. Ghana is a West African nation bordered on the north by Burkina Faso, on the south by the Gulf of Guinea, and on the east and west by Togo and Ivory Coast, respectively. The nation now has an estimated population of 30.7 million people in sixteen (16) regions (Sasu, 2022). As of January 2022, Ghana recorded 8.8 million social media users thus, an increase from 8.2 million in the prior year (Wikipedia, 2014). In February 2022, there was an expected number of 8.6 million Facebook users while WhatsApp users fell short of the percentage which is expected to reach 89.9 percent of all internet users in the country by the third quarter of 2021. Over the years, the adoption of most social media sites in Ghana has maintained an increasing trend (Wikipedia, 2014). Again, a study (Sasu, 2022) indicates that roughly half of Ghana's population will have internet connectivity in 2021, with over 43 million mobile connections. As a result, internet access revenues were expected to hit 1.9 billion US dollars.

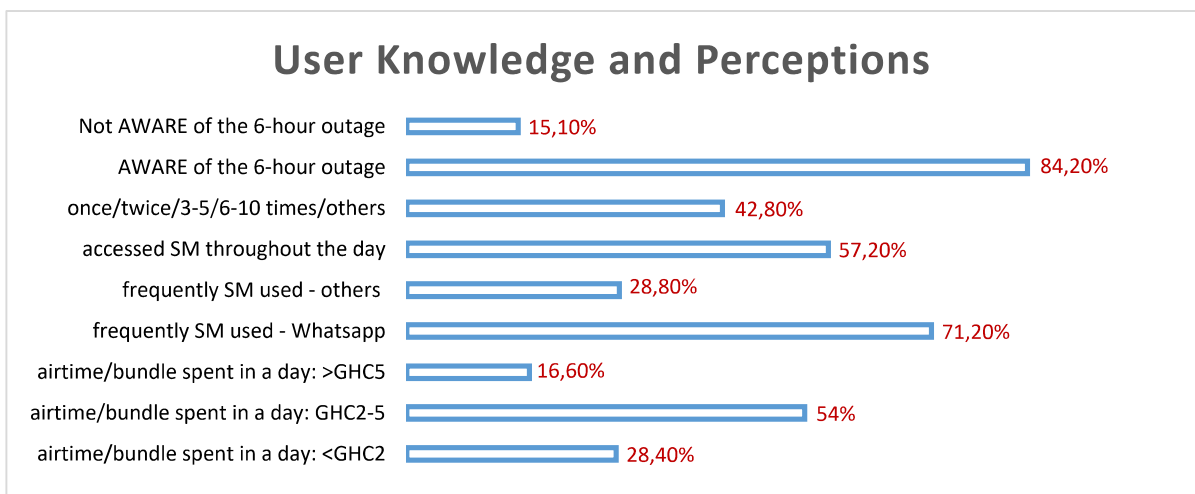
### 3. Pilot survey and analysis

A nationwide self-administered internet-based pilot survey was conducted in October of 2021. This exercise was carried out a few days after the global outage of Facebook on October 4, 2021. Participation in this pilot exercise was guided by both convenient and snowball sampling techniques. Analysis was carried out using the STATA version 16 software. This exercise aimed to give an overall picture of Ghanaian users' reactions as well as the immediate or short-term impact of the event.

#### 4. Result and discussion

A total of 278 Ghanaian citizens participated in the pilot survey, the majority of whom were male (63.7 percent), among the working class (25–34 years; 59.7 percent), never married (83.1 percent), literate (99.3 percent), Christians (95.7 percent), and earning less than 1,000 Ghana cedis (54.7 percent), as well as urban residents (69.4 percent) in Accra and Kumasi. These numbers corroborate the findings of the following studies: Ghana is a Christian country (Wikipedia, 2014), and more than half of the population has internet access (Sasu, 2022). Additionally, the minimum wage is seldom enforced since most workers, particularly those in the informal sector, are paid less than the minimum wage (Otoo, 2018).

Interestingly, the assessment of the Ghanaian populace's views and awareness shows that a majority of 234 (84.2 percent) respondents recognized the 6-hour downtime on Whatsapp, Facebook, or Instagram on October 4, 2021, particularly Whatsapp users (71.2 percent). This finding is similar to Sasu's research (Sasu, 2022), which found that Whatsapp is Ghana's most used social networking site. Furthermore, the data shows that more than half of active users (57.2 percent) use the social media platform throughout the day, with an average daily airtime/bundle usage between 2 and 5 Ghana cedis. It is not surprising since internet access revenues were expected to hit 1.9 billion US dollars in West African countries according to Sasu (Sasu, 2022). (see figure. 1).



**Figure 1:** User Knowledge and Perceptions about the October 2021 Facebook Outage

Finally, the study examined the impact of the SM outage on Ghanaian users by assessing their instant reactions and attitudes during the Facebook outage on October 4, 2021. The analysis of fig. 2 below reveals that most participants were unsure or reluctant to speak about their immediate response to the SM outage (25–36 percent). However, the majority (39 percent; 109/278) expressed dissatisfaction, frustration, and unhappiness throughout the outage duration. Following this, a quarter of them reported feeling lonely and turning to other social media sites (37 percent), such as Twitter while others couldn't do anything (19 percent). These results corroborate previous research findings indicating that heavy social media usage increases the likelihood of loneliness and depression in adolescents (Isaac & Frenkel, 2021). Since most of the active users utilize their preferred SM platform throughout the day, constant SM alerts and notifications may have a detrimental effect on users' impulse control, impair their attention and concentration, interrupt their sleep, and turn them into phone slaves (Robinson & Smith, 2021). Similarly, University of Pennsylvania research discovered that cutting down on social media might help you feel less lonely and alienated and increase your general wellness (Hunt et al., 2018). Finally, considering the fact that power outages in Ghana are a common occurrence (Nduhuura, 2021), the data shows that there is a level of tolerance for disruptions when systems fail in the study area, since more than half of the working age population (25–34 years) were not perturbed during the Facebook outage.

## USERS REACTIONS AND ATTITUDE

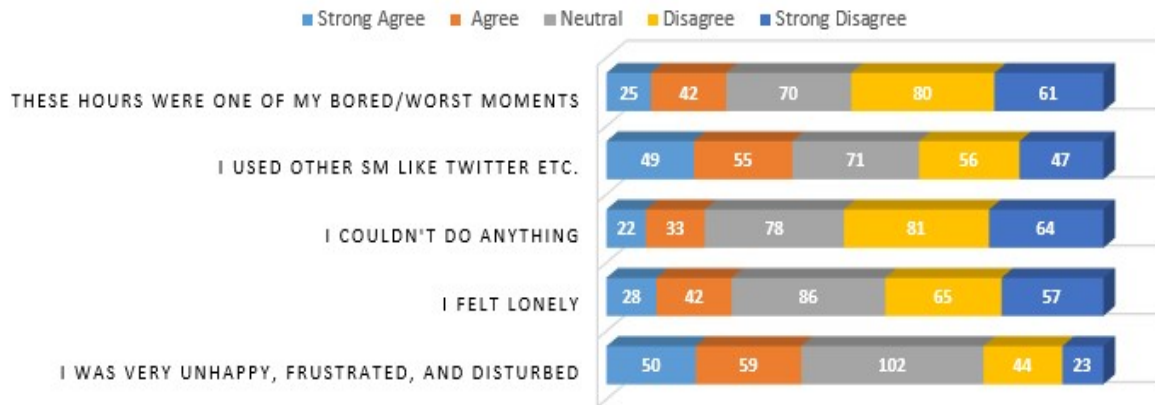


Figure 2: Users' immediate reaction and attitude following the October 2021 Facebook Outage

### 5. Conclusion

The snapshot analysis of Ghanaian active social media users' immediate reaction and attitude following the October 2021 Facebook outage revealed that future social media outages could result in unhealthy life-threatening challenges such as loneliness, anxiety, and addiction among the age group 25-34 years. From the data, it seems that the working age population (25-34 years) is most likely to afford SM. Also, there is some level of tolerance for disruptions due to the frequent electricity outages among the working-age population (25-34 years). This provides direction to the focus group for future research and interventions addressing the unhealthy concerns identified by this study.

Finally, the research sheds additional information on participants' high spending habits in order to subscribe to SM. As most Ghanaian youth earn below the minimum wage, this poses a challenge to their money saving ethic.

### 6. Recommendation

It is therefore advised that a comprehensive effort be made to educate the public about the hazards of excessive SM usage, particularly among youths. Furthermore, SM norms and ethics should be created and included in the school curriculum from the basic to the tertiary levels. This will prevent many people from becoming phone slaves and will foster true friendship and camaraderie among the upcoming generations. In addition, it is recommended that all stakeholders implement the Wi-Fi method with the necessary limits in schools, residences, and workplaces in order to decrease the active SM users' individual high-speeding behaviors. Lastly, several studies should be undertaken in different parts of the world to determine the extent to which SM outages affect their users, to allow for the well-informed deployment of the necessary countermeasures.

### ORCID

Emmanuel Keku<sup>†</sup>  <https://orcid.org/0000-0001-5864-4843>

### References

1. Dollarhide, M. (2021). Social Media: Sharing Ideas and Thoughts. Investopedia. Available at: <https://www.investopedia.com/terms/s/social-media.asp>
2. Endo, K., Ando, S., Shimodera, S., Yamasaki, S., Usami, S., Okazaki, Y., & Nishida, A. (2017). Preference for solitude, social isolation, suicidal ideation, and self-harm in adolescents. *Journal of adolescent health*, 61(2), 187-191.
3. Forgeard, V. (2021). Why the World Is a Global Village - brilliantio. Available at: <https://brilliantio.com/why-is-the-world-a-global-village/>
4. Hunt, M. G., Marx, R., Lipson, C., & Young, J. (2018). No more FOMO: Limiting social media decreases loneliness and depression. *Journal of Social and Clinical Psychology*, 37(10), 751-768. <https://guilfordjournals.com/doi/pdf/10.1521/jscp.2018.37.10.751>

5. Isaac, M., & Frenkel, S. (2021). Gone in Minutes, Out for Hours: Outage Shakes Facebook. The New York Times. Available at: <https://www.nytimes.com/2021/10/04/technology/facebook-down.html>
6. Lawler, R. (2021). "Facebook is down, along with Instagram, WhatsApp, Messenger, and Oculus VR". The Verge. Archived from the original on October 4, 2021. Retrieved October 4, 2021.
7. Lutkevich, B. (2021). What is Social Media? WhatIs.Com. Available at: <https://www.techtarget.com/whatis/definition/social-media>
8. Madory, D. (2021). "Facebook's historic outage explained". Kentik. Archived from the original on January 4, 2022. Retrieved October 7, 2021.
9. Maier, D. J. (2022). Ghana. Available at: <https://www.britannica.com/place/Ghana/Soils>. Accessed on 22/04/2022.
10. Memon, A. M., Sharma, S. G., Mohite, S. S., & Jain, S. (2018). The role of online social networking on deliberate self-harm and suicidality in adolescents: A systematized review of the literature. *Indian journal of psychiatry*, 60(4), 384–392. <https://doi.org/10.4103/psychiatry.IndianJPsychiatry.414.17>
11. Moosa, H. (2022). Importance of Social Media in Our Lives - IIM SKILLS. IIM SKILLS. Available at: <https://iimskills.com/importance-of-social-media-in-our-lives/>
12. Nduhuura, P., Garschagen, M., & Zerga, A. (2021). Impacts of electricity outages in urban households in developing countries: a case of Accra, Ghana. *Energies*, 14(12), 3676.
13. Otoo, K. N. (2018). Minimum Wage Fixing In Ghana, Policy Paper 2018/1. Labour Research and Policy Institute (LRPI) OF TUC. Available at: <http://library.fes.de/pdf-files/bueros/ghana/16590.pdf>
14. Religion in Ghana - Wikipedia. (2014). Religion in Ghana – Wikipedia. Available at: [https://en.wikipedia.org/wiki/Religion\\_in\\_Ghana](https://en.wikipedia.org/wiki/Religion_in_Ghana)
15. Robinson, L., & Smith, M. (2021). Social Media and Mental Health - HelpGuide.org. (2021, April). Available at: <https://www.helpguide.org/articles/mental-health/social-media-and-mental-health.htm#:~:text=The%20negative%20aspects%20of%20social%20media&text=However%2C%20multiple%20studies%20have%20found,about%20your%20life%20or%20appearance>.
16. Sasu, D, D. (2022). Number of active social media users in Ghana 2017-2022. Available at: <https://www.statista.com/statistics/1171445/number-of-social-media-users-ghana/>
17. Vidal, C., Lhaksampa, T., Miller, L., & Platt, R. (2020). Social media use and depression in adolescents: a scoping review. *International review of psychiatry (Abingdon, England)*, 32(3), 235–253. <https://doi.org/10.1080/09540261.2020.1720623>

**ACADEMIC  
VOICES (AV)**