iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 10 **Issue:** XI **Month of publication:** November 2022

DOI: https://doi.org/10.22214/ijraset.2022.47450

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue XI Nov 2022- Available at www.ijraset.com

Social Media Platforms during Covid-19 and Its Relationship to Online Learning: A Literature Review

Baraa A.M. Abed[1], Tahani R.K. Bsharat[2]
[1]*College of Graduate Studies, Department of Media and Communication, Arab American University, Ramallah, West Bank, Palestine*
[2]*Faculty of Major Language Studies, Universiti Sains Islam Malaysia, Malaysia, Bandar Baru Nilai, Nilai, Negeri Sembilan*

Abstract: ***During the COVID-19 lockdown period, many educational institutions have shifted their focus from face-to-face instruction to online instruction mainly through social media. In addition, this paper reviewed various Social Media platforms and their relationship to Online Learning during Covid-19. Furthermore, schools, teachers, students, ministries of education, and policymakers already have the experience to deal with unexpected changes. Moreover, most related studies showed that Social Media platforms such as Facebook and its sister services, Messenger, and Instagram positively affect online learning during the Covid-19 crisis.***
Keywords: Social media, COVID-19, Online learning.

I. INTRODUCTION

Coronavirus disease 2019 (Covid-19), reported in China in December 2019, rapidly spread around the world. Many countries implemented lockdowns to slow down the spread of Covid-19. As a result of the spread of the Covid-19 virus across the globe, every level of education and its stakeholders were affected in many ways. During the conversion of education to an online distance mode, administrators were required to make numerous decisions in a short time. As a result of the swift switch to online distance education, teachers, students, and parents faced unprecedented challenges (Kidd and Murray, 2020). Researchers have found that the public uses social media during times of crisis to express their views and interact with each other and government agencies (Pappacharissi and de Fatima Oliveira, 2012). Therefore, social media platforms have become vital for government agencies in times of crisis. Governments can use social media to reduce panic, fear, and anxiety in the society by sharing up-to-date information about the crisis (Celik, Dindar, & Muukkonen, 2022).

II. SOCIAL MEDIA

As well as other technological terms, the term "Social Media" has changed all aspects of life dramatically. There has been a vast improvement in business communications, whether between business owners or between business owners and customers (Bank, 2015). Communication and marketing have been revolutionized by social media, according to marketers, by creating new channels with customers that are more cost-effective and less costly. Through direct contact with users of these platforms, products can be promoted and sold, and new communication and marketing strategies can be developed. Meanwhile, others consider social media platforms just a bubble to dazzle and deceive customers (Drahošová & Balco, 2017).

Furthermore, Andreas Kaplan and Michael Haenlein defined social networking sites as sites that allow users to communicate, exchange opinions, ideas, and experiences, create and exchange content, and discuss content with each other over the Internet. Millions of users share articles, photos, and videos on a daily basis. Therefore, social media differs from traditional media due to the sharing feature they offer their users. Taking advantage of social media platforms such as Facebook (2004), YouTube (2005), and Twitter (2006) has led to an increasing interest in creating content and directly involving users in building and enhancing the site (Drahoová & Balcony, 2017). Consequently, social media has evolved into a term that encompasses a wide array of features that can accommodate users' different needs (Hao & Gao, 2017).

Additionally, in 2016, the Sensis Social Media Report noted that audience participation on social media sites increased unexpectedly during this decade. For instance, the same study revealed that 91% of Australians use the internet every day and that 69% of them send or share images or links on social media sites like Facebook and Twitter (Hao & Gao, 2017).

©IJRASET: All Rights are Reserved

According to Facebook data from 2018, Facebook has around 2.3 billion registered members worldwide, making it the largest social media platform. As a result, Facebook has changed how people obtain information and spend a lot more time on media other than television. The outcome was a switch from the old news format to the new digital model, which has a significant impact on developing societal perceptions (Cinelli Et. Al, 2020). An average user spends 50 minutes each day on Facebook and its sister services, Messenger and Instagram (Allcott, 2020).

It should be mentioned that the terms "social networking" and "social media" have different meanings. The phrase "social media" refers to the various media platforms that people use to interact socially and to collaborate and communicate online. It consists of websites for sharing pictures and videos, blogs, wikis, etc. The term "social networking" is used to describe people who use websites like Facebook, LinkedIn, MySpace, etc. to create profiles, interact with others, and join communities of friends and people who share interests. As a result, social media is a more inclusive phrase (Drahoová & Balco, 2017).

Since social media first appeared, theories have been put forth to ascertain both its advantages and disadvantages. According to Allcott and others (2020), it offers various advantages on a variety of levels and has significantly decreased the cost of calling, communicating, and sharing information. Social media platforms are regarded as one of the most significant variables influencing an individual's happiness and well-being at the level of interpersonal connections. On a political level, it has aided in political action and resistance in democratic societies as well as protest and resistance in authoritarian nations.

Others, however, contend that social media use has detrimental impacts on both the personal and social levels. In terms of one's own life, excessive usage of these platforms is bad for mental health and can cause addiction. These platforms foster ideological "echo chambers" within social networks of friends or like-minded people, escalating political polarization to the point of extreme. These sites may also serve as important distribution mechanisms for online disinformation campaigns (ibid).

III. SOCIAL MEDIA DURING THE CORONA PANDEMIC

The World Health Organization has deemed the COVID-19 epidemic, an infectious disease brought on by the most recent human virus, as a significant worldwide concern (Cinelli Et. al, 2020). Physical movement has been restricted as a result of this one-time extraordinary worldwide lockdown, and a generation of people who are housebound are rediscovering social media. During the present epidemic, social media has advanced to new heights and is playing a significant role in continuing education, the transmission of scientific information, peer review, online dialogues, and much more (Goel & Gupta, 2020).

Social media, which has more than 2.3 billion users worldwide, is the most popular information source due to the simple and affordable internet access it offers. It is also one of the simplest and most efficient ways to share important information and the discussions about COVID-19 on how we perceive the virus and strategies for dealing with it (González-Padilla & Tortolero-Blanco, 2020). (Cuello-Garcia, 2020). Positively, social media has made it easier for medical experts in various professions to communicate with one another and with pertinent authorities (Cuello-Garcia Et.Al, 2020). Health protocols have been disseminated at an unprecedented rate due to the pandemic at the national, regional, and global levels (González-Padilla & Tortolero-Blanco, 2020).

These platforms also made it possible for researchers to swiftly link and publish their findings, which aided in the dissemination of their study and improved access to previously difficult-to-find information (Cuello-Garcia , 2020). Whereas numerous peer-reviewed scientific publications and websites offered a variety of facilities for unrestricted access or paid subscription (Goel & Gupta, 2020). Similarly, research has indicated that during the pandemic, the number of downloads, enquiries, and citations of these publications increased by 8–10 times as a result of the posting of scientific material on social media platforms (Facebook, Twitter, etc.) (González-Padilla & Tortolero-Blanco, 2020).

Social media tools helped both the general population and health experts. For instance, 10–14 days prior to the peak of COVID-19 cases, social media had a significant role in China in educating the public about the illness, its symptoms, and how to prevent it (González-Padilla & Tortolero-Blanco, 2020). Additionally, despite the isolation (wide quarantine), fear and grief brought on by the spread of illnesses, and the occurrence of deaths, these platforms have maintained contact with family and friends (González-Padilla & Tortolero-Blanco, 2020).

The growth of rumors and dubious information, which is thought to be the most challenging task for health service providers since misleading information causes a state of uncertainty and distraction, has also been made possible by the new information environment (Cinelli et al., 2020). (Venegas-Vera, 2020). Furthermore, the word "infodemic" was used to emphasize the risks of incorrect information during an outbreak since certain studies have shown that false news and erroneous information may spread more quickly and widely than material that is factually accurate. Information spreads more quickly because it distorts and affects societal reaction.

Thus, conspiracy theories and less preventive activities during the epidemic have been connected to the usage of social media as a source of information (Cuello-Garcia, 2020). As a result, one of the most important problems facing researchers today is understanding how people decide whether to seek or avoid information and how this decision affects their behaviour (Cinelli, 2020). The World Health Organization (WHO) has resorted to using search optimization techniques within social media platforms to direct anyone who inquires about the epidemic in the right direction by directing them to trustworthy sources. This improves its public relations efforts to respond appropriately to rumors and common questions that are obtained through social media channels. When looking for information on COVID-19 and other health-related topics, social media networks themselves also offer notifications or warnings with connections to reliable sources (Cuello-Garcia, 2020).

IV. SOCIAL NETWORKING DURING COVID-19 AND ITS RELATIONSHIP TO ONLINE LEARNING

Worldwide educational institutions have been compelled by the Corona pandemic to fast transition from on-campus to online learning through e-learning platforms and mobile learning applications. The biggest difficulty for many colleges and schools during COVID-19 is providing an e-learning system because success in it demands knowledge of the key issues now facing e-learning systems. The difficulties and variables that affect how successfully the e-learning system is used during the epidemic vary by country and civilization. Many people were already familiar with e-learning, but the pandemic has led to a fresh discovery of it. (Almaiah,2020). Additionally, Goel & Gupta (2020) described online education as the teaching process where students and teachers are separated by time or location and this process is carried out through technology that permit remote connection Regarding social media platforms, numerous studies have found that Facebook is the most widely used one because 85–99% of university students use it for both personal and professional reasons, including learning (Elkaseh, 2016).

A study by Hassanien and colleagues (2020) examined how learners in higher education institutions reacted to social media applications for e-learning and the effects of these media practices, such as knowledge sharing and social media features, motivation, and uses, on the acceptance of distance learning (electronic). The findings of this pilot study, which involved more than 410 students, revealed that these websites and the activities associated with them, such as perceived utility and considered ease of use, have a considerable favorable impact. As a result, these websites significantly contribute to students' adoption of the online learning environment. In the same vein, Giannikas (2020)'s study shed light on the effects of Facebook use in graduate-level e-learning programs. The study looked at how Facebook is now used in higher education, what e-learning is like on Facebook, and how Facebook affects the e-learning community. The study's findings showed that most students view Facebook groups favorably since they perfectly complement learning management systems (LMS). The findings also showed that utilizing Facebook during the course was more appealing than using their university's Course Management System (CMS) because it included an interactive learning component. Additionally, Kolokytha and colleagues' (2015) study looked at how students interact with two distinct platforms to accomplish the purpose of remote learning, as well as the suitability of the Facebook platform if it is utilized for e-learning.

While a study by Elkaseh and colleagues (2016) looked at the elements that influence whether or not teachers and students embrace the usage of these social networking sites for learning and teaching. The Technology Acceptance Model (TAM) was used as the foundation for the study, which investigated perceived usability, perceived utility, and behavioral intention to use new technologies, and tested them as influencing factors for adopting social media for e-learning.

V. SOCIAL THEORIES AND THEIR RELATIONSHIP TO SOCIAL NETWORKING SITES

A. First: Social Correlation Theory

In the context of social networking sites, Hu and colleagues (2013) developed a mathematical formula that incorporates several social theories, including the Sentiment Consistency Theory and the Emotional Contagion Theory. They looked at a collection of micro-blogs, such as Twitter, which serve as typical forums for human expression and allow users to easily create information regarding breaking news, general events, or commercial products. As a result, this formula aids in determining the right moment to express a certain emotion and the general consensus on various issues.

Hu has also examined two actual Twitter data sets empirically. He discovered that current sentiment analysis techniques make the assumption that texts are independent and symmetrically distributed, and that they frequently concentrate on creating a sophisticated and private environment to handle spam and SMS. Nevertheless, the aforementioned methods do not take use of the fact that microblogging is networked data and not just social data. Following that, he offered a sociological strategy (SANT) to handle the tweets and classify emotions (ibid).

Hu and others' (2013) Theoretical Hypotheses

1) Sentiment consistency refers to how consistently the emotions of two messages delivered by the same user compare to two messages chosen at random.
2) According to Emotional Contagion, two messages sent by friends are more likely to have comparable feelings than two messages chosen at random.
3) There is no distinction between random data and relational data.

a) (xi) stands for the intended message from the circle of friends or acquaintances.
b) (xr) stands for unintended spam.
c) (yi) symbolizes the user's feelings toward the message.
d) (sct) stands for the first vector.
e) (scr) stands for the second vector.

The suggested formula requires the establishment of two vectors, sct and scr, the determination of an equal number of elements in each vector, and the calculation of the degree of feeling difference between two messages, xi 1 and xi 2, for the same user in the first vector:

Tij= yi 1- yi 2

Investigating the consistency of feelings will be aided by this formula. The second vector should use the same formula by computing the emotional difference between the input message xi and a random message xr. It is important to note that this proposed theory and methodology for sentiment analysis is helpful for investigating how emotions spread on the web, how people's emotions relate to internal (their friends) and external (public events) factors, as well as when comprehending the distinctions in feelings between the virtual world and the real world (Hu Et, Al. 2013).

B. Second: Social Exchange Theory (SET)

In the 1920s, anthropology, social psychology, and sociology, in particular, contributed significantly to the development of social exchange theory (Cropanzano, 2005).

The theory examines the relationship that develops as a result of two people interacting, using a cost-benefit analysis to determine the dangers and advantages of creating this relationship (Roeckelein, 2018). Consequently, the goal of the connection is to maximize advantages and minimize expenses (Surma, 2015).

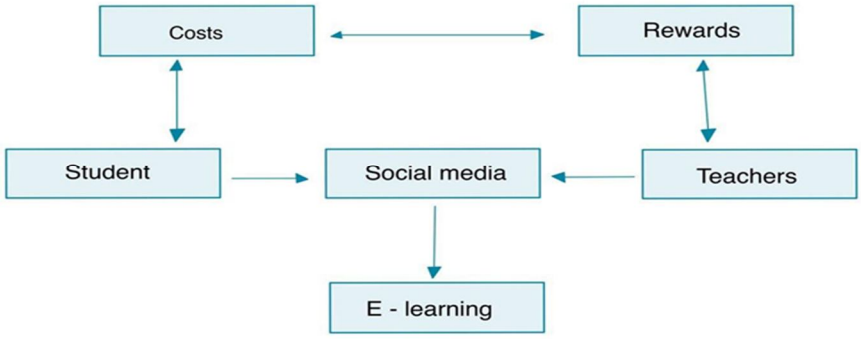
According to the hypothesis, this analysis also happens in friendships, professional connections, and fleeting ties like those that exist between a consumer and a salesman (Mcray, 2015).

The social exchange theory contends that one or both sides will quit the connection or give it up if the costs outweigh the advantages (Emerson, 1976). The components of life that have a negative value to a person, such as the effort put forth in a relationship and the bad traits of the partner, such as: Time, money, effort, etc., are defined as costs in this context. The aspects of the connection that have positive worth, such as acceptance and support, are what are referred to as benefits. According to the social exchange perspective, people determine the overall worth of a connection by deducting its expenses from its advantages using the following formula: Benefits - costs = value / return, if this value is positive (+), then the relationship is healthy, and it is expected to continue. However, if the result is negative (-), the relationship will most likely end (Lambe, 2001).

VI. THE NORM OF RECIPROCITY

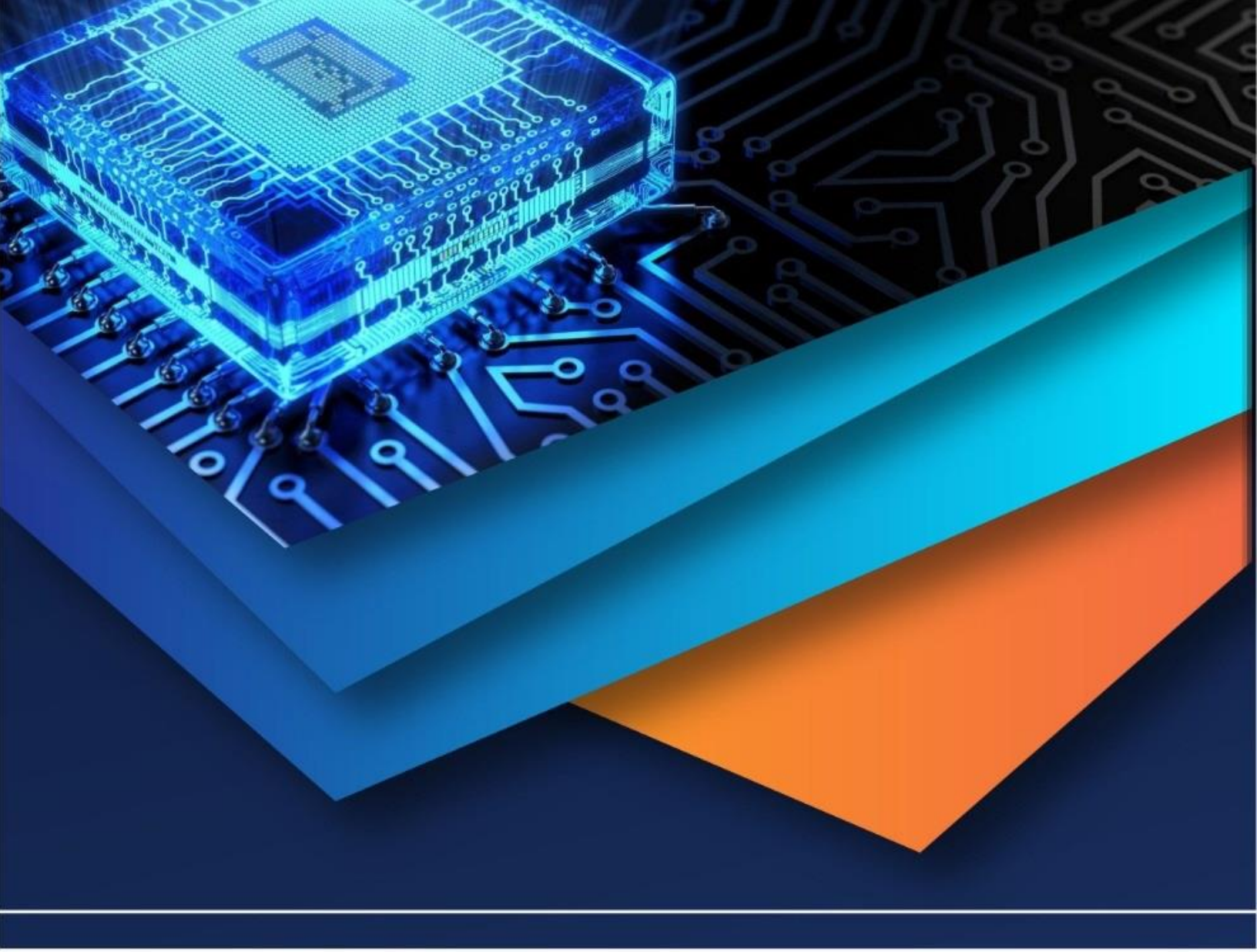
This norm was first put forth by Alvin Gouldner in 1960 in an effort to stabilize relationships, lessen selfishness, and alter the perception that relationships are only for one's own gain or self-interest. According to the Norm of Reciprocity, a benefit must be paid back and the recipient must not suffer harm (Spielberger, 2004). The social exchange theory claims that reciprocity is a behavioral reaction to perceived kindness and rudeness, and that as a result, it is a significant influence on how people behave (Surma, 2015).

Because they offer the chance to maintain social contacts at a relatively cheap cost compared to relationships outside the virtual world, social networking platforms are seen as being excellent for social exchange. According to a study by Surma (2015), one of the most well-known social media platforms on the Internet that enables users to communicate with their friends and acquaintances, Facebook should be used to apply the rule of reciprocity to social relationships. The following model can serve as a representation of the theory:



REFERENCES

[1] Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. Education and Information Technologies, 25(6), 5261–5280.
[2] Allcott, H., Braghieri, L., Eichmeyer, S., Gentzkow, M. (2020). The Welfare Effects of Social Media. American Economic Journal. 110(3), (629-76).
[3] Bank, V., D. (2015). The impact of social media: advantages or disadvantages. African Journal of Hospitality, Tourism and Leisure Vol. 4 (2).
[4] Cinelli, M., Quattrociocchi, W., Galeazzi, A., Valensise, C., M., Brugnoli, E., Schmidt, A., L., Zola, P., Zollo, F., Scala, A. (2020). The COVID-19 social media infodemic. Scientific Reports. 10(16598).
[5] Cropanzano, R. (2005). Social Exchange Theory: An Interdisciplinary Review. Journal of Management, 31(6), 874–900.
[6] Cuello-Garcia, Carlos; PÃ©rez-Gaxiola, Giordano; van Amelsvoort, Ludo (2020). Social Media can have an impact on how we manage and investigate the COVID-19 pandemic. Journal of Clinical Epidemiology, (), S0895435620306521.–
[7] Celik, I., Dindar, M., & Muukkonen, H. (2022). # NotHolidayButDistance Education: a study on social media use for K-12 education during the COVID-19 pandemic. Information and Learning Sciences.
[8] Drahošová, Martina; Balco, Peter (2017). The analysis of advantages and disadvantages of use of social media in European Union. Procedia Computer Science, 109(), 1005–1009.
[9] Emerson, R M (1976). Social Exchange Theory. Annual Review of Sociology, 2(1), 335–362.
[10] Elkaseh, A., M., Wong, K., W., Fung, C., C. (2016). Perceived Ease of Use and Perceived Usefulness of Social Media for e-Learning in Libyan Higher Education: A Structural Equation Modeling Analysis. International Journal of Information and Education Technology. 6(3).
[11] Giannikas, C. (2020). Facebook in tertiary education: The impact of social media in E- learning. Journal of University Teaching & Learning Practice, 17(1).
[12] Goel, A., Gupta, L. (2020). Social Media in the Times of COVID-19. JCR: Journal of Clinical Rheumatology, 26(6), 220–223.
[13] González-Padilla, D., A., Tortolero-Blanco, L. (2020). Social media influence in the COVID-19 Pandemic. INT BRAZ J UROL, 46(1), 120-124.
[14] Hao, J., Gao, B. (2017). Advantages and Disadvantages for Nurses of Using Social Media. Journal of Primary Health Care and General Practice.
[15] Hassanien, Aboul Ella; Shaalan, Khaled; Tolba, Mohamed Fahmy (2020). [Advances in Intelligent Systems and Computing] Proceedings of the International Conference on Advanced Intelligent Systems and Informatics 2019 Volume 1058 || . , 10.1007/978-3-030-31129-2-. ,()
[16] Hu, Xia; Tang, Lei; Tang, Jiliang; Liu, Huan (2013). [ACM Press the sixth ACM international conference - Rome, Italy (2013.02.04-2013.02.08)] Proceedings of the sixth ACM international conference on Web search and data mining - WSDM '13 - Exploiting social relations for sentiment analysis in microblogging. , (), 537.
[17] Kolokytha, Eleftheria; Loutrouki, Sofia; Valsamidis, Stavros; Florou, Giannoula (2015). Social Media Networks as a Learning Tool. Procedia Economics and Finance, 19(), 287–295.
[18] Lambe, C. Jay; Wittmann, C. Michael; Spekman, Robert E. (2001). Social Exchange Theory and Research on Business-to-Business Relational Exchange. Journal of Business-to-Business Marketing, 8(3), 1–36.
[19] McDonell, J.; Strom-Gottfried, K. J.; Burton, D. L.; Yaffe, J. (2006). "Behaviorism, social learning, and exchange theory". In Robbins, S. P.; Chatterjee, P.; Canda, E. R. (eds.). Contemporary human behavior theory: a critical perspective for social work. Pearson. pp. 349–85.
[20] Mcray, Jeni (2015). "Leadership Glossary: Essential Terms for the 21st Century". Credo Reference. Mission Bell Media.
[21] Roeckelein, Jon E. "Elsevier's Dictionary of Psychological Theories". Credo Reference. Elsevier B.V.
[22] Spielberger, Charles Donald (2004). "Encyclopedia of Applied Psychology".
[23] Venegas-Vera, A., V., Colbert, G., B., Lerma, E., V. (2020). Positive and negative impact of social media in the COVID-19 era. IMR Press. 21(4), 561–564.
[24] Wang, Q., Chen, W., Liang, Y. (2011). The Effects of Social Media on College Students. Johnson &Wales University. Feinstein Graduate School. RSCH5500-Research & Analysis.



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)