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Social Media Usage and Transitioning into Online Classes During COVID-19- A Survey of Undergraduate Students in Georgia, United States

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ABSTRACT

Previous studies on the use of social media (SM) during the COVID-19 pandemic have focused on the use in sustaining academic communication. This study aimed to assess the association between SM and the ease of transitioning to online classes during the COVID-19 pandemic using survey data from 872 undergraduate students. The findings showed that Snapchat and Instagram were the most preferred social media sites among participants. Compared to students who use SM for <2 hours a day, use for > 5 hours (AOR= 2.44; 95% CI, 1.13 – 5.25) or 3 to 5 hours a day (AOR = 2.01, 95% CI 1.06-3.81) increased the odds of easily transitioning to online classes. Students reported relatively lower odds of ease in transition to online studies if they felt that SM increased their stress (AOR = 0.45, 95% CI, 0.32-0.66). The use of social media for formal academic communication could stimulate an interactive learning environment, foster social presence, and enhance learning outcomes.

Keywords: *online learning; COVID-19; social media; online classes; undergraduate students.*

INTRODUCTION

In late 2019, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) outbreak spread across the globe so rapidly that by March 11, 2020, coronavirus disease or COVID-19 was declared a pandemic by the World Health Organization (WHO) (Zheng et al., 2020, Zhang et al., 2020). As of January 31st, 2021, more than 26.1 million cases in the United States (U.S.) were reported to the Center for Systems Science and Engineering (CSSE) at John Hopkins University. The unprecedented crises from COVID-19 posed critical challenges for the public health, research, and medical communities (Fauci et al., 2020).

Aside from its health impacts, COVID-19 disrupted social life in an unprecedented manner, including disruption in college students' education in various ways due to school closures. School closures at the early stage of the COVID-19 were warranted given evidence of school closures' effectiveness during outbreaks of other respiratory diseases such as SARS (Bell et al., 2004) and pandemic influenza (Copeland et al., 2013). To limit the spread of the disease, the Centers for Disease Control and Prevention (CDC) issued guidelines recommending the closures of schools, restaurants, churches, and other gathering places (Qualls et al., 2017). By April 2020, 90% of students worldwide were affected by school closures (UNESCO, 2020). However, resulting disruptions in academic curricula have had medical, social, and financial impacts on students, faculty, and staff as well as their families (Esposito and Principi, 2020). Despite the challenges, in the United States, many institutions of higher education opted for changes in course delivery formats as a better alternative to long-term closures, including transitioning from in-person courses to online learning, to limit transmission of SARS-CoV-2 and reduce the risk of COVID-19 for students and staff (Viner et al., 2020).

The transition of courses to online altered the patterns of social interaction drastically, leading to social isolation and loneliness. For example, the inability for in-person social interaction with their peers necessitated people to use social media platforms such as Facebook, YouTube, and

Instagram as a way for virtual socialization, to compensate for the lack of in-person interaction. In addition to the closures of schools, stay-at-home orders were implemented in many states ensuring a mandatory in-house quarantine. A study found that college-age persons in the health sciences in the US and Thailand spent an average of between 8 to 10 hours a day on smartphones alone before the pandemic (Penglee et al., 2019). According to Eyesafe Nielsen Estimates, COVID-19 screen time spiked to over 13 hours per day (United Healthcare, 2020). This is because it is difficult to avoid prolonged screen time during the coronavirus pandemic when people are forced to remain physically distanced from each other, and rely on electronic media to stay updated on happenings around the world especially on the daily number of new cases and deaths of COVID-19 (Singh et al., 2020). Prolonged internet use and cyber-space socializing have been documented to have other unforeseen consequences in the COVID-19 era including increases in gaming disorder and cyber-bullying (Yang, 2021, Cheng et al., 2020).

Studies have shown that even though online learning has many positives, it can hamper the progress of students who are already struggling academically and increase their likelihood of developing a mental health disease (Xu and Jaggars, 2013). For example, Pantic indicated that continuous use of popular social media especially Facebook was associated with depression (Pantic, 2014). Various studies conducted during the COVID-19 pandemic reported that an increase in the prevalence of anxiety (Gao et al., 2020) and depression among people with higher exposure to watching disaster news on social media (Zhao and Zhou, 2020).

In response to the sudden transition and efforts to provide students with quality and smooth transition to online classes, some educators are using social media as a learning tool since most students are engaging with social media outside the classroom. Previous studies on the use of social media and academic work during the COVID-19 pandemic have been focused on using social media to sustain academic communication including teaching, online community, and student support (Sobaih et al., 2020) as well as uptake of social or digital media as an online learning tool among prospective high school, veterinary and medical students (Mulenga and Marbán, 2020, Lazarus et al., 2017, Mahdy, 2020). However, to the best of our knowledge, no study has been conducted among undergraduate students with various majors and the ease of transitioning to online classes. The main objective of this paper is therefore to assess the influence of social media on transitioning into online classes due to the closure of schools during COVID-19 among undergraduate students at a large southern American university. The specific research questions include: (1) How frequently did undergraduate students use social media during the Covid-19 pandemic after schools were closed? (2) What most common social media sites were college students exposed to during the COVID-19 pandemic? (3) How does the frequency of social media usage affect transition into online classes during a pandemic

METHODS

Context of the study

This paper is part of a bigger project in collaboration with the Student Wellness and Health Center at a large southern American university to assess the impact of stress on risky behavior among college students in real-time during the COVID-19 pandemic and provide empirical evidence to enhance effective health education and wellness programs. This observational study, conducted between March and June 2020, uses a cross-sectional design.

Study population and recruitment

All undergraduate students were eligible to participate in the study if they were 18 years or older and enrolled in this University. Potential participants were recruited by sending notices of surveys to the university's innovative virtual classroom (Folio) with the help of instructors. An online-

designed questionnaire and a detailed email were sent to all potential participants. Participants had the opportunity to enter a raffle to win $100 Visa gift cards after completing the questionnaires.

Data instrument and collection

The main data collection instrument was an online self-administered questionnaire which was developed in the English language by co-investigators using Qualtrics. The questionnaire was piloted among 51 students in two classrooms and modified to include sections on social media-specific questions and delivered online. The questionnaire was structured into different sections and began with an anonymously informed consent upon request of the respondent, followed by close-ended questions. Data were collected over three months between April and June 2020. It took participants about twenty minutes to complete the questionnaire.

Definition and operationalization of variables

The main outcome variable was the *ease of transition into online classes*, a dichotomous variable defined as an affirmative answer (based on response categories Yes or No) to the question “Has social media helped you transition into online classes?”

To operationalize the primary independent variable, frequency of social media use, respondents were asked to report the hours they spend on social media by answering the question “how much time do you spend on social media per day?” The time spent on social media constituted an ordinal variable with four categories-- low (less than 2 hours), medium (2-3 hours), high (3-5 hours), and very high (more than 5 hours). The study participants were also asked to rank social media sites frequently used on a scale of 1 to 10 by responding to the question “on a scale of 1- 10 rank what social media sites you have used the most?” The social media platforms included Snapchat, Instagram, YouTube, Facebook, Twitter, TikTok, GroupMe, Pinterest, LinkedIn, and Tumblr. Considering the mean rank score, each platform was classified as common (mean rank < 3.5), fairly common (mean rank <7), and Uncommon (mean rank ≥ 7).

To find out how the association between ease of transition into online classes and time spent on social media varied according to the perception of stress, the question “does using social networking sites increase or decrease your stress?” was included. The variable was categorized as increase, decrease, or does not affect me.

Age was treated as a continuous variable in full years. Information on participants' sex was obtained using the question “What sex were you assigned at birth?” with the options of male or female while the race was categorized as White, Black/African American, and other (Hispanic or Latino, Asian/Asian American, American Indian or Native Alaskan, Middle Eastern and Native Hawaiian). We also included other demographics like relationship status, which was defined as not in a relationship, married/partnered, and in a relationship. Other variables were school year (not seeking a degree, year 1 undergraduate, year 2 undergraduate, year 3 undergraduate, year 4 undergraduate, year 5 or more undergraduate and other), enrolment status (full time, part-time, other), living conditions (on-campus, off-campus, with parents, others), and Grade Point Average (GPA) letter grades (A, B, C, D/F)

Statistical methods

Descriptive statistics of demographic variables, exposure, and outcomes variables were examined. Univariate analyses of categorical variables were presented as absolute numbers and percentages while continuous variables such as age were presented as means with standard deviations. The minimum and maximum values of age were also presented. Chi-square tests and one-way ANOVA were respectively used for categorical and continuous variables in the bivariate analyses to

compare the differences by the transition into online classes. Results were presented as P values and were considered significant at a level of 0.05. Logistic regression analysis was used to assess the effect of frequency of social media use on transitioning into online classes before and after controlling for covariates. The adjusted Odds Ratios (OR) and 95% confidence intervals were estimated. all statistical analyses were conducted with Statistical Analysis Software (SAS) version 9.4, of the SAS System for Windows (copyright 2002-2012 by SAS Institute Inc, Cary, North Carolina).

Ethical approvals (IRB)

The study was approved by the Research Integrity Board of the Georgia Southern University.

RESULTS

A total of 1249 students of Georgia Southern University participated in the study out of whom 996 completed the survey (79.7%). Among the valid participants, 872 were undergraduate students and therefore included in the analysis. Incomplete responses and non-undergraduate students were excluded from the analysis. The mean age was 21.9 (+/- 4.8) years. The majority of the respondents (n=565, 64.8%) identified as females, 20.1% were white (n=175) and 20.5% were blacks (n=358). Furthermore, 67.9% of the undergraduate students were in their first three years of studies (n= 592). Of the students who reported using social media, 44.1% spent between 2-3 hours a day (n=320) while 14.7% spent more than 5 hours per day on social media. 44% of the students declare that Social Media helped in the transition to online classes (which is the outcome variable). The student characteristics are shown in Table 1.

Table 1: *Descriptive Characteristics and social media usage of study participants*

Variable	**Value**	**Number (%)**
Gender	Male Female Other	565 (64.8) 294 (33.7) 13 (1.5)
Race	White Black/African American Other	175 (20.10 358 (20.5) 518 (59.4)
Relationship status	Married/partnered In a relationship Not in a relationship	65 (7.5) 381 (43.7) 426 (48.8)
Year of school	Not seeking year Other Year 1 undergraduate Year 2 undergraduate Year 3 undergraduate Year 4 undergraduate Year 5 or more	4 (0.5) 20 (2.30 134 (15.40 211 (24.2) 247 (28.3) 187 (21.4) 69 (7.9)
Enrollment	Full time Part-time Other	807 (92.6) 60 (6.8) 5 (0.6)

Living conditions	On-campus Off-campus Living with parents Others *Missing*	68 (8.1) 520 (61.9) 238 (28.3) 14 (1.7) 32
GPA	A B C D/F *Missing*	327 (38.6) 379 (44.8) 133 (15.7) 8 (0.9) 25
Social media usage	Low (less than 2 hours) Medium (2-3 hours) High (between 3 – 5 hours) Very high (more than 5 hours) *Missing*	77 (10.6) 320 (44.1) 222 (30.6) 107 (14.7) *146*
Social media helped in the transition to online school	Yes No *Missing*	319 (44.0) 406 (56.0) *147*

Ranking of social media preference

The social media sites used by participants were ranked on a scale of 1 to 10. The most popular sites were Snapchat and Instagram which had an average of 3.1 (+/-2.1)) and 3.3(+/- 2.0) respectively. The least common social media sites were LinkedIn (7.9+/-1,9) and Tumblr (8.6+/-1.9).

Table 2: *Popularity of social media sites ranked by study participants*

The popularity of each Social Media	**Social Media**	**Mean rank* ± SD**
Common (mean rank < 3.5)	Snapchat	3.1 ± 2.1
	Instagram	3.3 ± 2.0
Fairly common (mean rank <7)	YouTube	4.4 ± 2.5
	Facebook	4.7 ± 2.6
	Twitter	5.1 ± 2.8
	TikTok	5.7 ± 2.8
	GroupMe	5.8 ± 2.4
	Pinterest	6.5 ± 2.0
Uncommon (mean rank ≥ 7)	LinkedIn	7.9 ± 1.9
	Tumblr	8.6 ± 1.9

*. Mean of the 1- 10 rank for social media platforms.

Characteristics of study participants by frequency of social media usage

In Table 3 below, ANOVA analysis showed that there is a significant difference in the age of the students by the frequency of social media usage (P value < 0.0001). Students who reported the highest social media usage were on average the youngest (20.8 years old) and those who reported the lowest are the oldest (25.7 years old). While moving from the lowest usage categories towards the highest, the age of the students decreased steadily. In addition, chi-square test showed that there is a significant association between social media usage and gender (P value < 0.0001), race (P value < 0.0001), relationship status (P value = 0.0003). year of school (P value = 0.0012), type of enrollment (P value = 0.0019), living conditions (P value = 0.0006), and GPA (P value = 0.0147).

The frequency of high and very high social media usage is higher in females (32.6% and 17.3%) compared to Males (25.8% and 10.0%). In white students, the frequency of high and very high social media usage is 29.0% and 7.2%, which is lower compared to African American students (37.2% and 32.1%) and Other races (38.2% and 21.5%). When considering relationship status, it was observed that students who were married/partnered had the lowest frequency of high and very high social media usage (23.3% and 7.3%). For the same usage categories, the frequency was higher in students who declared they were in a relationship (29.6% and 14.2%) and the highest in students who were not in a relationship (32.6% and 16.4%).

The proportion of students who had high and very high social media usage was higher in full-time enrolled students (30.9% and 15.3%) compared to part-time enrolled students (22.5% and 7.5%). Among students who reported living off-campus, 27.1% belong in the high usage category and 10.9% in the very high usage category; but these frequencies are lower compared to students who lived on campus (41.1% and 19.6%) and those living with parents (36.1% and 19.5%). The frequency of high social media usage was more than 30% in students from years 1, 2, and 3, while being less than 25% in years 3 and 4. When considering GPA, it was observed that while going from a GPA value of letter grade of A to B and C, the social media users reported increases. More specifically, the frequency of students who reported using social media 3-5 hours a day is 26.0% in students reporting a GPA value of letter grade A, 33.1% in those with a letter grade B, and 36.0% in those reporting a letter grade of C. For the same GPA categories, the frequency of using social media more than 5 hours a day goes from 12.5% (letter grade A) to 15.9% (letter grade B), and 17.1% (letter grade C).

Table 3: *Descriptive characteristics of study participants by social media usage*

Variable	**Value**	**Frequency of social media usage**				
		Low	**Medium**	**High**	**Very High**	**P. value**
Age	Years	25.7± 9.2	22.0 ± 4.8	21.1 ± 3.2	20.8 ± 2.7	<.0001
Gender	Female Male Other	32 (6.7) 43 (17.9) 2 (18.2)	206 (43.4) 111 (46.3) 3 (27.3)	155 (32.6) 62 (25.8) 5 (45.5)	82 (17.3) 24 (10.0) 1 (9.1)	<.0001
Race	White Black/AA Other	58 (13.0) 6 (4.4) 13 (9.0)	226 (50.8) 36 (26.3) 58 (40.3)	129 (29.0) 51 (37.2) 42 (29.2)	32 (7.2) 44 (32.1) 31 (21.5)	<.0001

Relationship status	Married/partnered In a relationship Not in a relationship	16 (29.1) 28 (8.6) 33 (9.5)	22 (40.0) 154 (47.5) 144 (41.5)	13 (23.6) 96 (29.6) 113 (32.6)	4 (7.3) 46 (14.2) 57 (16.4)	.0003
Year of school	Not seeking degree Year 1 Year 2 Year 3 Year 4 Year 5 or more Other	2 (100.0) 9 (7.8) 12 (7.1) 27 (13.2) 13 (8.3) 10 (16.4) 4 (22.2)	0 (0.0) 45 (39.1) 73 (43.5) 86 (42.0) 85 (54.1) 27 (44.3) 4 (22.2)	0 (0.0) 37 (32.2) 61 (36.3) 63 (30.7) 38 (24.2) 15 (24.6) 8 (44.4)	0 (0.0) 24 (20.9) 22 (13.1) 29 (14.2) 21 (13.4) 9 (14.8) 2 (11.1)	.0012
Enrollment	Full time Part time Other	67 (9.8) 8 (20.0) 2 (50.0)	300 (44.0) 20 (50.0) 0 (0.0)	211 (30.9) 9 (22.5) 2 (50.0)	104 (15.3) 3 (7.5) 0 (0.0)	.019
Living conditions	On campus Off-campus Living with parents Others	2 (3.6) 55 (12.5) 18 (8.8) 1 (7.7)	20 (35.7) 217 (49.4) 73 (35.6) 4 (30.8)	23 (41.1) 119 (27.1) 74 (36.1) 4 (30.8)	11 (19.6) 48 (10.9) 40 (19.5) 4 (30.8)	.0006
GPA	A B C D/F	31 (10.8) 28 (28.9) 18 (16.2) 0 (0.0)	146 (50.7) 133 (42.4) 34 (30.6) 4 (80.0)	75 (26.0) 104 (33.1) 40 (36.0) 0 (0)	36 (12.5) 49 (15.9) 19 (17.1) 1 (20.0)	.0147

The association between frequency of social media usage and transition into online classes

In answering the research questions the logistic regression results show that the time students spend on social media had a significant effect on whether they were helped by social media in their transition to online instruction. When compared to students who use social media for <2 hours a day, students who use social media for more than 5 hours have significantly higher odds (Adjusted Odds Ratio [AOR] = 2.44; 95% CI, 1.13 – 5.25) of perceiving that social media helped in their transition to online classes. Furthermore, the odds are significantly higher for students who spend 3 to 5 hours a day (AOR = 2.17, 95% CI 1.1-4.29) and those who spend 2 to 3 hours (AOR = 2.01, 95% CI 1.06-3.81) as compared to the social media time of 2 hours a day. In addition, this shows that as the time a student spends on social media increases, the odds of ease in transitioning to online classes increase steadily.

There is also a significant effect of the stress caused by social media usage on the odds it has in helping in online transition. Compared to students who experienced a decrease in stress due to social media, students who did not experience stress due to social media use have significantly lower odds of perceiving they were helped by social media in the transition to online instruction (AOR = 0.45, 95% CI, 0.32-0.66); the odds are also smaller for students who had an increase in

stress due to social media (AOR = 0.51, 95% CI, 0.32-0.82). Age in completed years also has a significant negative association with transitioning to online studies (AOR=0.91, 95% CI, 0.85-0.98). The association of the other variables considered in the model was not significant with the dependent variable, perceived help in transitioning to online studies.

Table 4: *Logistic Regression of factors associated with helping in the transition to online classes*

Predictors	Adjusted Odds Ratio	95% CI	
		LL	UL
Social Media Usage (vs. low, i.e., less than 2 hours)			
Very high >5 hrs	**2.44**	1.13	5.28
High 3 to 5 hrs	**2.18**	1.1	4.29
Moderate 2 to 3 hrs	**2.01**	1.06	3.81
Stress due to Social Media (vs decrease)			
Does not affect	**0.45**	0.32	0.66
Increase	**0.51**	0.32	0.82
Addicted to Social Media (vs No)			
Yes	1.31	0.88	1.93
Relationship status (vs not in a relationship)			
In a relationship, not married	0.91	0.65	1.27
Married/partnered	0.58	0.24	1.41
Enrollment status (vs part-time)			
Full time	1.54	0.66	3.58
Other	1.24	0.08	18.45
School year (vs Year 1)			
Not seeking a degree	-	-	-
Other	0.3	0.08	1.16
Year 2 undergrad	0.68	0.39	1.18
Year 3 undergrad	0.61	0.35	1.07
Year 4 undergrad	0.57	0.31	1.05
Year 5 or more undergrad	**0.41**	0.18	0.94
Gender (vs male)			
Female	0.95	0.67	1.35
Other	1.13	0.31	4.09
Race (vs black)			
White	1.19	0.75	1.87
Other	0.91	0.54	1.55
Age	**0.91**	0.85	0.98
GPA –letter grade (vs A)			
B	0.93	0.66	1.33

C	0.84	0.51	1.39
D/F	1.15	0.12	10.2
Living conditions (vs living with parents)			
On-campus	0.6	0.32	1.14
Off-campus	1.17	0.78	1.76
Others	0.85	0.24	3

Abbreviations: LL, Lower Limit, UL, Upper Limit. Note: Adjusted odds ratio in bold is statistically significant at P < .05. The "-" indicates that the estimate is not stable

DISCUSSION

In response to the sudden transition and in the efforts to provide students with a quality and smooth transition to online classes, some schools used social media as a learning tool because most students engage with social media outside the classroom. Studies have shown the multiple uses of social media in higher education include scholarly communication, student support, and engagement as well as learning processes (Al-Aufi and Fulton, 2014, Hamid et al., 2015, Tu, 2000). This population-based cross-sectional study identified the common social media platforms and frequency of using social media as well as its association with the ease of transition to online classes among undergraduate students during the COVID-19 pandemic. The findings of the study indicate that undergraduate students spent 2 to 3 hours on social media and those who spent more than five hours on social media easily transitioned onto online classes compared to those who spent less than two hours.

What are the most common social media sites college students were exposed to during the COVID- 19 pandemic?

A major finding in the current study is that Instagram and Snapchat were the most common preferred social media sites among participants unlike in other studies that found WhatsApp and Facebook to be dominant (Raj et al., 2018, Villanti et al., 2017, Habes et al., 2018). Wang and colleagues identified YouTube in addition to Facebook as the most common social media sites used among college students (Wang et al., 2015). The contrast may be because the preference for sites changed over time and new social media apps have been introduced in recent years. According to Pew Research, a survey of U.S. adults found that YouTube and Facebook were the most preferred social media sites in 2018 while younger Americans (18 to 24 years) preferred Snapchat and Instagram (Smith and Anderson, 2019). Our findings suggest that college students continue to prefer Snapchat and Instagram.

Both Snapchat and Instagram are social media sites that focus more on pictures and videos as compared to others in our study. Snapchat and Instagram are also the most common platforms for people below 24 years in the US (Taylor-Jackson and Moustafa, 2021). The preference for pictorial and video-based sites could be because users can personalize the platforms and reiterate their relevance in Internet communication (Villanti et al., 2017). Additionally, as students spend time online on these sites, they can see pictures of their friends and perhaps simulate face-to-face human contact that is missing due to the COVID-19 pandemic. LinkedIn was least common possibly because it is more professional and less social. Thus, our study population may not see its relevance now. Nevertheless, Villianti and colleagues reported that LinkedIn was popular among younger adults especially blacks who were not enrolled in college probably because they may be in the workforce or seeking employment (Villanti et al., 2017). The unpopularity of LinkedIn could also imply difficulty in transitioning to online classes. For example, if undergraduate students

consider the online environment purely for social interaction, they are less likely to consider it for learning which is considered as less of social activity. Further investigations might need to be done. However careful data analysis could show that LinkedIn is popular among students towards the end of their studies as they could be using it to network and prepare themselves to enter the professional world. Interestingly, Tumblr and Twitter were not common, unlike in similar studies especially because they share similar characteristics as Snapchat and Instagram.

How frequently did college students use social media during the COVID-19 pandemic after schools were closed?

The proportion of undergraduate students using social medial for up to 5 hours a day was higher than the 74.9% reported by Falah and colleagues (Falah et al., 2017). Students who spent more than 5 hours per day on social media were found to be relatively younger (mean age =20.8 [+/-2.7] years). This generation has been described as the post-millennial generation (Generation Z) and according to Pew Research Center as the one that spends most of the time on social media. The study's findings seem to support this description. This generation may spend long hours on social media because of the opportunity to network, socialize, build personal brands, and share information on the platforms. Despite the justification of using social media for longer hours, other studies also reported the detrimental effect of reduced commitment to academic and recreational reading (Huang and Capps, 2013, Huang et al., 2014, Mokhtari et al., 2009).

Besides, longer hours on social media have been associated with anxiety. A cohort study by Thomee and colleagues reported that college students who displayed higher use of chat-based platforms were more likely to report mental health symptoms during follow-up (Thomée et al., 2012, Thomée et al., 2010). As users spend more time on social media the likelihood of developing feelings of inadequacy and insecurity increases; this could lead to increased stress levels. Psychologists and other mental health experts have described more time spent on social media as a primer to feelings of social pressure which could also be considered as stress. While online users could be forced to interact with more information, the constant pressure to respond to interactions could also serve as stressors to students. Therefore, authorities in colleges could consider creating programs and resources to encourage students to be mindful of the time spent on social media and identify and deal with addiction.

Is the association between social media usage and transition into online classes modified by perceived stress among college students during the COVID-19 pandemic?

The characteristic of generation Z on the frequency and savviness of social media increases the likelihood of smooth transitioning into online classes. Our findings show that students who spend more time using social media platforms are more likely to find social media helpful in the transition to online classes. The potential explanation of this association is that spending more time on social media makes students better at using technology, which helps them cope better with online classes transition and the technologies used. Furthermore, spending time on social media may help students to be more comfortable not only with the online platforms but also with the use of the computer or other devices for online learning. Their ability to live online could make their transition to online learning less challenging compared to students who use social media rarely or infrequently. These explanations are plausible given that other studies have shown that proper use of social media for formal academic communication could stimulate an interactive learning environment, foster social presence, and enhance learning outcomes (Liburd and Christensen, 2013, Fusch and Ness, 2015, Sobaih et al., 2020).

Also, students who reported decreased stress levels due to social media are more likely to easily transition to online classes possibly because of familiarity with digital technology. Thus, it is likely that the introduction to online lessons will merely be an extension of their social media usage or an

opportunity to learn new media like Zoom, WebEx, and Teams. While for those with increased stress associated with social media, the thought of spending time to learn how to navigate the online synchronous meeting tools (SMT) and adjusting to nontraditional modes of academic communications may find the remote learning challenging. There is therefore the need for institutions to develop strategies that address the needs of individual students, like providing mental health support for those struggling to adjust to online learning and using less complicated tools. Furthermore, the types of SMT should be standardized across all colleges to make it easier for those not familiar to easily use and adapt.

STRENGTHS AND LIMITATIONS

This study had some limitations. First, the study was limited in the number of social media sites that were included as choices. The study only focused on Snapchat, Instagram, YouTube, Facebook, Twitter, TikTok, GroupMe, Pinterest, LinkedIn, and Tumblr. However, WhatsApp was not included. Although it is mostly considered as an instant messaging app it does have the characteristics of the social media sites included in the study. WhatsApp like the other social media sites mentioned in this study, allow users to exchange pictures and videos and gives the ability to view what other users are doing through status updates. The study had defined social media as a form of technology that has made communication, sharing ideas, building relationships, and accessing information easier. While there is still some debate as to whether WhatsApp can be considered social media, or it is merely a messaging app with social networking characteristics the study might have missed out on some insights as WhatsApp has over 2 billion users in the world. Additionally, the study missed a critical component on investigating what the study participants spend time doing on social media. This could have been an opportunity to associate the type of activity that the students spend time on with the stress levels that they experience from spending time on social activity. A study on the time spent, the activity on social media, and the level of stress would have given the researchers an idea of the activities that bring about stress while online and these could have been compared to online learning. Also, the study relied on self-reported data which could have introduced bias in answering the questions. However, given that the questionnaire was pilot tested and delivered anonymously using online media, the effect of such a bias is limited as participants are not impacted by the pressure of social desirability.

This study has some important strengths: first, the results can be applied to similar populations and necessary policies may be implemented to address the digital needs of all students. Additionally, due to the large sample size, the effect of several key predictors of transition into online classes could be investigated thus providing valuable insight to the education systems about proper interventions. Finally, the study is timely and investigates a pertinent issue within the COVID 19 pandemic and will serve as an important source of information on how universities can manage the transition to online learning during the pandemic.

CONCLUSION

Students who use social media less often may experience difficulty in transitioning to online classes. Thus, such students may need special accommodation in terms of resources to familiarize themselves with the platforms and stress management which may be associated with the sudden increase in the frequency of using such platforms, The use of social media for formal academic activities could also stimulate an interactive learning environment, foster social presence, and enhance learning outcomes.

Further investigations into the perceptions of online learning and social media usage and the impact of transitioning to online classes on academic performance are required. Future research should consider replicating the study among instructors and professors to explore relevant associations.

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