

Perception of Fake News: A Survey of Post-Millennials

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This study examined post-millennials' news consumption habits and perception of fake news in social media. A survey was completed by a non-random sample of 415 students at State University of New York in Oneonta during the academic year 2017-2018. The results revealed that more than half of post-millennials accessed various social media several times a day, while nearly one in five admitted accessing social media every hour of the day. As for the amount of time devoted to social media, nearly one-third of the students admitted using social media for 7-10 hours per day, and slightly less than one-third of the students spent 5-6 hours per day on social media. With regard to news consumption habits of post-millennials, data analysis revealed that nine in 10 students used their smartphones to check the news online, and most students used multiple sources of news. About four-fifths of the students obtained their news from online newspapers and magazines, while three-fifths of them also used social media for obtaining news. As for the amount of time devoted to consuming news, four-fifths of the students indicated that they spent 1-2 hours in a typical day for news consumption. In terms of exposure to fake news, nine in 10 students indicated that they had seen some news on social media that turned out to be fake news. These findings may have significant implications for social media as they plan to counter the proliferation of fake news on their platforms.

Keywords: news consumption habits, perception of fake news, post-millennials

The advent of the smartphone and social media has significantly transformed our lives in terms of how we communicate and entertain ourselves. In recent years, smartphone and social media usage has grown exponentially among the general public and specifically within the post-millennials or Generation Z (Statista, 2015). The Generation Z is the demographic cohort born during the mid-1990s to mid-2000s (roughly 13-24 years of age today) and has followed the millennials or Generation Y (Seemiller & Grace, 2016; Wood, 2013). Generation Z is the first cohort to have smartphones, social media, and other technologies readily available at a young age.

Although a significant amount of research has been done in the recent past about the use of social media among Generations X and Y, insufficient research exists about post-millennials' news consumption habit and perception of fake news as it relates to the social media. Since the digital world is changing rapidly every year, it is important to track its usage and impacts on an ongoing basis for detecting any trends and correlations, and for identifying significant implications. The present study attempts to contribute to the evolving knowledge by examining the implications of post-millennials' news consumption habits and perception of fake news.

Literature Review

Most recent studies (Oberst, Wegmann, Stodt, Brand, & Chamarro, 2017; Buglass, Binder, Betts, & Underwood, 2017) have found that excessive use of social media was partially due to what has been called the *fear of missing out* (FOMO). Al-Menayes' 2016 study also revealed that FOMO was associated with social media addiction. Furthermore, a new phenomenon termed *nomophobia* (no mobile phone phobia) has been identified as a symptom characterized by the fear of being without one's mobile phone. *Nomophobia* traits include feelings of anxiety when the phone is not available, repeatedly checking of messages, hearing of nonexistent phantom ring tones, and preference for mobile interaction over face to face communication (Billieux, Maurage, Lopez-Fernandez, Kuss, & Griffiths, 2015).

A 2009 survey of college students (Jarvis, Stroud, & Gilliland) revealed that most students accessed news on the web and cable television, and do not usually trust the sources.

A 2015 study by Mitchell and Gottfried found that 61% of millennials get their political news on Facebook, while 51% of Gen Xers get political news on Facebook. The results also indicated that about 26% of millennials chose politics and government as the topics they are most interested in.

A 2012 survey (Hermida, Fletcher, Korell., & Logan) of 1600 Canadians revealed that two-fifths of social media users received news from people they follow on services like Facebook, while one-fifth got news from news media they follow. Rosengard, Tucker-McLaughlin, and Brown (2014) found that students, who are exposed to news on social media, often rely on other internet sources to confirm it. A 2016 study revealed that majority of college students get breaking news from Twitter initially, which leads them to get more information from websites of traditional news organizations (Tandoc & Johnson, 2016).

Methodology

A survey of college students was conducted to examine the smartphone and social media usage and addiction among Generation Z during the academic year 2017-2018. The survey was administered via SurveyMonkey and was completed by a non-random sample of 415 students at State University of New York in Oneonta. This study poses the following research questions:

RQ 1: What is the nature of news consumption among post-millennials? Are there any statistically significant differences in terms of gender and age?

RQ 2: What are the perceptions of post-millennials about fake news on social media? Are there any statistically significant differences in terms of gender and age?

Results

The survey was completed by 415 students at State University of New York in Oneonta. The completion rate of the survey was 99%. The response rate was very high due to the fact that the students received extra points for completing the survey as part of a class requirement. Approximately 56% of the respondents were females, and 43% were males. About 63% of the subjects were 18-20 years of age, and 27% of them were 21-25. In terms of race, about 54% of the respondents were white and 46% were non-white (Hispanic, Black, Asian, Native American, Mixed). Approximately 48% of the subjects were freshman and sophomores, 42% were juniors and seniors, and 10% were graduate students.

How Does Generation Z Use Social Media?

The results revealed that Snapchat, Instagram, Facebook, and Twitter are the most widely used social media among Generation Z with majority of the respondents having multiple social media accounts. As shown in Table 1, 93% of the students had an account on Facebook, 95% had an account on Snapchat, 88% had an account on Twitter, and 58% had an account on Instagram. In addition, about 41% used YouTube while 15% used Google Plus.

Table 1

Most Frequently Used Social Media

Types of social media	Frequency and percent of respondents	
▼ I do not have an account on any social media	0.24%	1
▼ Facebook	93.49%	388
▼ Twitter	87.71%	364
▼ Snapchat	94.70%	393
▼ YouTube	40.72%	169
▼ Myspace	1.69%	7
▼ Google+	14.70%	61
▼ Instagram	57.83%	240
▼ Tumblr	7.47%	31
▼ Other (please specify)	Responses 4.82%	20
Total Respondents: 415		

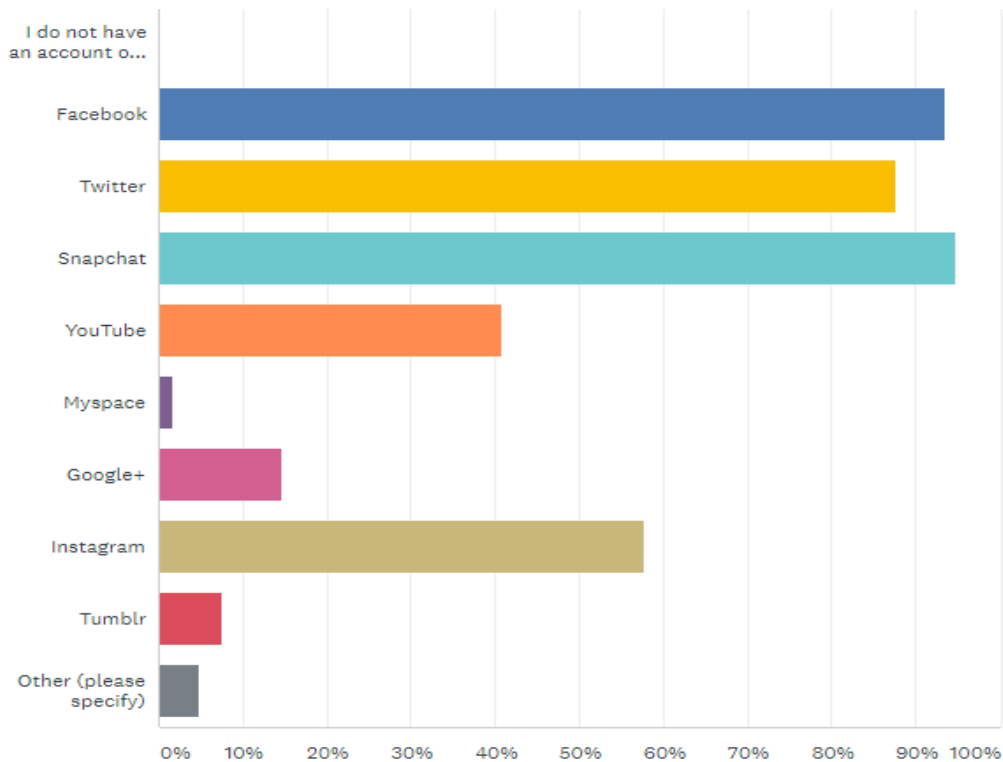


Figure 1. Most frequently used social media.

In terms of frequency of usage, 52% of the respondents indicated that they accessed various social media several times a day, while 18% admitted accessing social media every hour of the day (Table 2).

Table 2

Frequency of Social Media Usage

How often social media are used	Frequency and percent of respondents	
▼ Never	0.96%	4
▼ A few times a month	0.48%	2
▼ A few times a week	4.34%	18
▼ About once a day	24.82%	103
▼ Several times a day	51.57%	214
▼ Every hour of the day	17.83%	74
TOTAL		415

As shown in Table 3, in terms of gender variation, significant difference was found for the response option “about once a day” whereby more male students (33%) responded in affirmative than female students (19%). Conversely, for the response option “every hour of the day” more female students (25%) responded in affirmative than male students (9%).

Table 3

Frequency of Social Media Usage by Gender

Gender	Frequency and percent of respondents						
▼	NEVER ▼	A FEW TIMES A MONTH ▼	A FEW TIMES A WEEK ▼	ABOUT ONCE A DAY ▼	SEVERAL TIMES A DAY ▼	EVERY HOUR OF THE DAY ▼	TOTAL ▼
▼ Q90: Female (A)	0.85% 2	0.85% 2	2.99% 7	18.80% 44 B	51.71% 121	24.79% 58 B	56.52% 234
▼ Q90: Male (B)	1.11% 2	0.00% 0	6.11% 11	32.78% 59 A	51.11% 92	8.89% 16 A	43.48% 180
▼ Total Respondents	4	2	18	103	213	74	414

Note. * $p = 0.05$, 95% confidence.

In terms of age variation, the data showed significant differences for most of the dimensions. As shown in Table 4, the younger students accessed the social media more often than the older students.

With regard to the amount of time devoted to social media, approximately 32% of the students admitted using social media for 7-10 hours per day, 30% spent 5-6 hours per day, and 29% spent 1-2 hours a day (Table 5).

In terms of gender variation, the results showed significant difference for two dimensions. More females (14%) used social media for 11 hours or more per day than males (0.56%). Conversely, more male students used (37%) social media for 1-2 hours per day than female (24%) students (Table 6).

In terms of age variation, the data showed significant difference for two dimensions. As shown in Table 7, the younger students spent more time on social media than the older students.

Table 4

Frequency of Social Media Usage by Age

Age groups

Frequency and percent of respondents

	NEVER	A FEW TIMES A MONTH	A FEW TIMES A WEEK	ABOUT ONCE A DAY	SEVERAL TIMES A DAY	EVERY HOUR OF THE DAY	TOTAL
Q89: 18-20 (A)	0.76% 2	0.38% 1	1.91% 5 C	14.89% 39 BC	57.63% 151 C	24.43% 64 BC	63.29% 262
Q89: 21-25 (B)	1.82% 2	0.91% 1	2.73% 3 C	29.09% 32 AC	57.27% 63 C	8.18% 9 A	26.57% 110
Q89: 26 and above (C)	0.00% 0	0.00% 0	23.81% 10 AB	76.19% 32 AB	0.00% 0 AB	0.00% 0 A	10.14% 42
Total Respondents	4	2	18	103	214	73	414

Note. * $p = 0.05$, 95% confidence.

Table 5

Amount of Time Spent on Social Media

Amount of time

Frequency and percent of respondents

Q89: 0 hours	1.20%	5
Q89: 1-2 hours	29.40%	122
Q89: 5-6 hours	29.88%	124
Q89: 7-10 hours	31.57%	131
Q89: 11 hours or more	7.95%	33
TOTAL		415

Table 6

Amount of Time Spent on Social Media by Gender

Gender

Frequency and percent of respondents

	0 HOURS	1-2 HOURS	5-6 HOURS	7-10 HOURS	11 HOURS OR MORE	TOTAL
Q90: Female (A)	0.43% 1	23.93% 56 B	31.62% 74	30.34% 71	13.68% 32 B	56.52% 234
Q90: Male (B)	2.22% 4	36.67% 66 A	27.78% 50	32.78% 59	0.56% 1 A	43.48% 180
Total Respondents	5	122	124	130	33	414

Note. * $p = 0.05$, 95% confidence.

Table 7

Amount of Time Spent on Social Media by Age

Age groups

Frequency and percent of respondents

	0 HOURS	1-2 HOURS	5-6 HOURS	7-10 HOURS	11 HOURS OR MORE	TOTAL
Q89: 18-20 (A)	0.76% 2	14.89% 39 BC	39.31% 103	32.82% 86	12.21% 32 BC	63.29% 262
Q89: 21-25 (B)	2.73% 3	37.27% 41 AC	19.09% 21	40.00% 44	0.91% 1 A	26.57% 110
Q89: 26 and above (C)	0.00% 0	100.00% 42 AB	0.00% 0	0.00% 0	0.00% 0 A	10.14% 42
Total Respondents	5	122	124	130	33	414

Note. * $p = 0.05$, 95% confidence.

How Does Generation Z Consume News?

The results revealed that 92% of Gen Zers used their smartphones to check the news online, and most students used multiple sources of news (Table 8). As shown in Table 9, there was no significant gender difference for most of the dimensions of this variable. However, in terms of age difference, data showed that older students preferred to get their news from television and younger students chose to use their laptops to access the news online (Table 10).

Table 8

Devices Used to Access the News

Types of devices

Frequency and percent of respondents

I do not follow news	3.38%	14
Smartphone	91.79%	380
Laptop	46.14%	191
iPad	6.04%	25
TV	48.31%	200
Radio	6.52%	27
Hard copy newspapers	4.83%	20
Hard copy magazines	2.66%	11
Total Respondents: 414		

Table 9

Devices Used to Access the News by Gender

Gender Frequency and percent of respondents

	I DO NOT FOLLOW NEWS	SMARTPHONE	LAPTOP	IPAD	TV	RADIO	HARD COPY NEWSPAPERS	HARD COPY MAGAZINES	TOTAL
Q90: Female (A)	4.29% 10	90.13% 210	48.93% 114	6.01% 14	47.64% 111	8.58% 20	4.72% 11	4.29% 10 B	121.07% 500
Q90: Male (B)	2.22% 4	93.89% 169	42.22% 76	5.56% 10	49.44% 89	3.89% 7	5.00% 9	0.56% 1 A	88.38% 365
Total Respondents	14	379	190	24	200	27	20	11	413

Note. * $p = 0.05$, 95% confidence.

Table 10

Devices Used to Access the News by Age

Age groups Frequency and percent of respondents

	I DO NOT FOLLOW NEWS	SMARTPHONE	LAPTOP	IPAD	TV	RADIO	HARD COPY NEWSPAPERS	HARD COPY MAGAZINES	TOTAL
Q89: 18-20 (A)	4.60% 12	90.04% 235	52.11% 136 C	5.75% 15	38.70% 101 C	8.05% 21	6.51% 17	2.68% 7	131.72% 544
Q89: 21-25 (B)	1.82% 2	93.64% 103	50.00% 55 C	9.09% 10	50.91% 56 C	5.45% 6	2.73% 3	3.64% 4	57.87% 239
Q89: 26 and above (C)	0.00% 0	100.00% 42	0.00% 0 AB	0.00% 0	100.00% 42 AB	0.00% 0	0.00% 0	0.00% 0	20.34% 84
Total Respondents	14	380	191	25	199	27	20	11	413

Note. * $p = 0.05$, 95% confidence.

With regard to sources of news, about 79% of the students obtained their news from online newspapers and magazines, while 58% also watched television news (Table 11). Furthermore, 60% of them indicated that they also got their news on Facebook (50%) and Twitter (50%). Only about 8% stated that they read hardcopy newspapers and magazines, and 7% also got their news from radio (Table 11). About 3% of the students admitted that they did not follow the news at all. As shown in the table below, there was no significant gender difference for this variable (Table 12). However, in terms of age variation, data showed that larger percentage of younger students used Facebook and Twitter to get their news compared to older students who preferred television news (Table 13).

Table 11

Sources of News Used by Generation Z

Sources of news	Frequency and percent of respondents	
▼ I do not follow news	3.38%	14
▼ Online newspapers and magazines	78.50%	325
▼ Hardcopy newspapers and magazines	8.45%	35
▼ Radio	7.25%	30
▼ Television	57.73%	239
▼ Twitter	50.48%	209
▼ Facebook	60.14%	249
Total Respondents: 414		

Table 12

Sources of News Used by Gender

Gender	Frequency and percent of respondents							
▼	I DO NOT FOLLOW NEWS ▼	ONLINE NEWSPAPERS AND MAGAZINES ▼	HARDCOPY NEWSPAPERS AND MAGAZINES ▼	RADIO ▼	TELEVISION ▼	TWITTER ▼	FACEBOOK ▼	TOTAL ▼
▼ Q90: Female (A)	1.51% 10	29.35% 194	3.63% 24	3.48% 23	20.27% 134	19.52% 129	22.24% 147	160.05% 661
▼ Q90: Male (B)	0.91% 4	29.45% 129	2.51% 11	1.60% 7	23.97% 105	18.26% 80	23.29% 102	106.05% 438
▼ Total Respondents	14	323	35	30	239	209	249	413

Table 13

Sources of News Used by Age

Age groups	Frequency and percent of respondents							
▼	I DO NOT FOLLOW NEWS ▼	ONLINE NEWSPAPERS AND MAGAZINES ▼	HARDCOPY NEWSPAPERS AND MAGAZINES ▼	RADIO ▼	TELEVISION ▼	TWITTER ▼	FACEBOOK ▼	TOTAL ▼
▼ Q89: 18-20 (A)	1.77% 13	27.56% 202	3.55% 26	3.27% 24	16.64% 122 BC	22.37% 164 BC	24.83% 182 C	177.48% 733
▼ Q89: 21-25 (B)	0.35% 1	28.62% 81	2.83% 8	2.12% 6	26.50% 75 AC	15.90% 45 AC	23.67% 67 C	68.52% 283
▼ Q89: 26 and above (C)	0.00% 0	50.00% 42	0.00% 0	0.00% 0	50.00% 42 AB	0.00% 0 AB	0.00% 0 AB	20.34% 84
▼ Total Respondents	14	325	34	30	239	209	249	413

Note. * $p = 0.05$, 95% confidence.

With regard to the type of news they consume, about 80% indicated that they paid attention to local news, 89% paid attention to national news, and 77% followed international news. Moreover, about 43% consumed sports news, 39% paid attention to science news, and 44% followed celebrity news (Table 14). In terms of gender variation, the results showed significant difference for several dimensions (Table 15). More male students consumed (58%) sports news compared to female students (32%), and more female students followed celebrity news (55%) compared to male students (30%). The results were at 95% confidence level, $p = 0.05$.

Table 14

Types of News Consumed by Generation Z

Types of news	Frequency and percent of respondents	
▼ I do not follow news	3.38%	14
▼ Local	80.43%	333
▼ National	89.13%	369
▼ International	77.05%	319
▼ Sports	43.24%	179
▼ Science	38.65%	160
▼ Celebrity	44.20%	183
Total Respondents: 414		

Table 15

Sources of News Consumed by Gender

Gender	Frequency and percent of respondents							
	▼ I DO NOT FOLLOW NEWS	LOCAL ▼	NATIONAL ▼	INTERNATIONAL ▼	SPORTS ▼	SCIENCE ▼	CELEBRITY ▼	TOTAL ▼
▼ Q90: Female (A)	5.15% 12 B	81.12% 189	88.41% 206	76.82% 179	32.19% 75 B	36.91% 86	55.36% 129 B	212.11% 876
▼ Q90: Male (B)	1.11% 2 A	79.44% 143	90.00% 162	77.22% 139	57.78% 104 A	40.56% 73	30.00% 54 A	163.92% 677
▼ Total Respondents	14	332	368	318	179	159	183	413

Note. * $p = 0.05$, 95% confidence.

In terms of age variation, data showed that larger percentage of younger students consumed sports news and celebrity news compared to older students. Conversely, larger percentage of older students consumed science news compared to younger students (Table 16).

Table 16

Sources of News Consumed by Age

Age groups Frequency and percent of respondents

	I DO NOT FOLLOW NEWS	LOCAL	NATIONAL	INTERNATIONAL	SPORTS	SCIENCE	CELEBRITY	TOTAL
Q89: 18-20 (A)	5.36% 14 B	75.86% 198	85.82% 224	72.41% 189	45.21% 118 C	29.12% 76 BC	52.11% 136 C	231.23% 955
Q89: 21-25 (B)	0.00% 0 A	84.55% 93	93.64% 103	79.09% 87	46.36% 51	53.64% 59 A	42.73% 47 C	106.54% 440
Q89: 26 and above (C)	0.00% 0	100.00% 42	100.00% 42	100.00% 42	23.81% 10 A	59.52% 25 A	0.00% 0 AB	38.98% 161
Total Respondents	14	333	369	318	179	160	183	413

Note. * $p = 0.05$, 95% confidence.

With regard to the amount of time devoted to consuming news, 82% of the respondents indicated that they spent 1-2 hours in a typical day for news consumption while 11% did not spend any time consuming news (Table 17). As shown in the table below, there was no significant gender difference for this variable (Table 18). In terms of age variation, older students were more likely to devote more time in news consumption on a daily basis (Table 19).

Table 17

Amount of Time Devoted to Consuming News

Amount of time

Frequency and percent of respondents

0 hours	11.33%	47
1-2	82.41%	342
3-4	4.82%	20
5-6	1.20%	5
7 hours or more	0.24%	1
TOTAL		415

Table 18

Amount of Time Devoted to Consuming News by Gender

Amount of time Frequency and percent of respondents

	0 HOURS	1-2	3-4	5-6	7 HOURS OR MORE	TOTAL
Q90: Female (A)	12.82% 30	81.62% 191	3.85% 9	1.28% 3	0.43% 1	56.52% 234
Q90: Male (B)	9.44% 17	83.33% 150	6.11% 11	1.11% 2	0.00% 0	43.48% 180
Total Respondents	47	341	20	5	1	414

Table 19

Amount of Time Devoted to Consuming News by Age

Age groups	Frequency and percent of respondents					
	0 HOURS	1-2	3-4	5-6	7 HOURS OR MORE	TOTAL
Q89: 18-20 (A)	14.50% 38 C	78.63% 206 C	5.34% 14	1.53% 4	0.00% 0	63.29% 262
Q89: 21-25 (B)	8.18% 9	84.55% 93 C	5.45% 6	0.91% 1	0.91% 1	26.57% 110
Q89: 26 and above (C)	0.00% 0 A	100.00% 42 AB	0.00% 0	0.00% 0	0.00% 0	10.14% 42
Total Respondents	47	341	20	5	1	414

Note. * $p = 0.05$, 95% confidence.

In terms of exposure to fake news, about 93% of the students indicated that they had seen some news on social media that turned out to be fake news (Table 20). As shown in Tables 21-22, there was no significant gender or age difference for this variable.

Table 20

Exposure to Fake News on Social Media

Responses	Frequency and percent of respondents	
Yes	92.51%	383
No	1.69%	7
Not sure	5.31%	22
I do not use social media	0.48%	2
TOTAL		414

Table 21

Exposure to Fake News on Social Media by Gender

Gender	Frequency and percent of respondents				
	YES	NO	NOT SURE	I DO NOT USE SOCIAL MEDIA	TOTAL
Q90: Female (A)	91.88% 215	0.85% 2	6.41% 15	0.85% 2	56.66% 234
Q90: Male (B)	93.30% 167	2.79% 5	3.91% 7	0.00% 0	43.34% 179
Total Respondents	382	7	22	2	413

Table 22

Exposure to Fake News on Social Media by Age

Age groups

Frequency and percent of respondents

	YES	NO	NOT SURE	I DO NOT USE SOCIAL MEDIA	TOTAL
Q89: 18-20 (A)	91.95% 240	1.53% 4	6.51% 17	0.00% 0 B	63.20% 261
Q89: 21-25 (B)	91.82% 101	2.73% 3	3.64% 4	1.82% 2 A	26.63% 110
Q89: 26 and above (C)	100.00% 42	0.00% 0	0.00% 0	0.00% 0	10.17% 42
Total Respondents	383	7	21	2	413

Note. * $p = 0.05$, 95% confidence.

Discussion and Conclusions

This study examined post-millennials' news consumption habits and perception of fake news in the social media. A survey was completed by a non-random sample of 415 students at State University of New York in Oneonta during the academic year 2017-2018. The most significant findings are discussed and interpreted below.

The results revealed that almost all Gen Zers (99%) own a smartphone, and 98% of them use their smartphones to connect to the Internet most of the time. More than half of Gen Zers spend nine hours or more in a typical day using their smartphones, and nearly half of them spend 3-8 hours per day on their smartphones. Data did not show any significant difference in terms of gender or age groups, which indicates that both males and females, and younger as well as older students are spending a significant amount of time on their smartphones on a daily basis.

With regard to the use of social media, the results revealed that Snapchat, Instagram, Facebook, and Twitter are the most widely used social media among Generation Z with majority of them having multiple social media accounts. In terms of frequency of usage, more than half of Gen Zers indicated that they accessed various social media several times a day, while nearly one in five admitted accessing social media every hour of the day. In terms of gender variation, data showed that more female students accessed various social media every hour of the day compared to males. As for age variation, the findings revealed that the younger students accessed the social media more often than the older students.

With regard to the amount of time devoted to social media, nearly one-third of the students admitted using social media for 7-10 hours per day, and slightly less than one-third of the students spent 5-6 hours per day on social media. There were no significant differences in terms of gender for most of the dimensions. However, a greater percentage of younger students spent more time on social media than older students.

With regard to news consumption habits of Generation Z, data analysis revealed that nine in 10 students used their smartphones to check the news online, and most students used multiple sources of news. About four-fifths of the students obtained their news from online newspapers and magazines, while three-fifths of them also used social media for obtaining news. Although there was no significant gender difference, younger students were more likely to get their news from social media. As for the amount of time devoted to consuming

news, four-fifths of the students indicated that they spent 1-2 hours in a typical day for news consumption. Older students were more likely to devote more time for news consumption on a daily basis compared to younger students. There was no significant gender difference for this variable. In terms of exposure to fake news, nine in 10 students indicated that they had seen some news on social media that turned out to be fake news. There was no significant gender or age difference for this variable.

These findings may have significant implications for social media as they plan to counter the proliferation of fake news on their platforms. This research was based on a non-random sample and focused on post-millennials, and thereby limiting the ability to generalize the results to the larger population. Future research with a random sample could focus on additional variables and dimensions relating to the usage of social media, and its implications for the personal, educational, and professional lives of all demographics.

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