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How Prolonged Social Media Use Affects Generation Z and their **New Media Literacy Skills**

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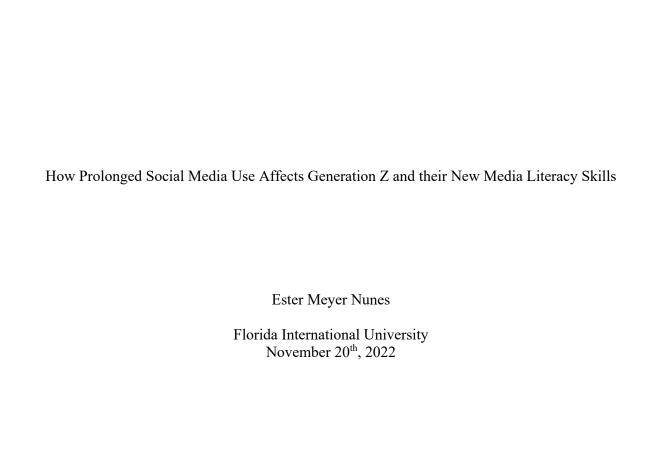
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Abstract:

With the creation of the internet and new media platforms emerging at the beginning of the 21st century, it has never been easier to stay connected; the world is within hand's reach. Gen Z spends much of their day online, watching videos, chatting with friends, and creating video, text and photo content. This research explores the effects of prolonged exposure to social media, whether positive or negative.

Keywords: generation z; media literacy skills; social media; burn out.

1. Introduction

The internet was created over 50 years ago during the cold war and the space race. In 1962, a scientist from M.I.T named J.C.R Licklider proposed a "galactic network" of computers that could talk to one another. This network would enable government leaders to communicate with each other. In 1965, another M.I.T scientist developed a way of sending information from one computer to another called "packet switching". It broke down data into blocks before sending it to its destination. (History.com, 2010).

However, the internet as we know it is much more recent. In 1991, a computer programmer from Switzerland called Tim Berners-Lee introduced the World Wide Web, a web of information that anyone on the internet could retrieve and contribute to, and not just a way of sending files and information from one place to another (History.com, 2010). A year later, in 1992, a group of students and researchers at the University of Illinois developed the first web browser, and Congress decided that the Web could be used for commercial purposes (History.com, 2010).

A few years later the first social networking sites (SNS) appeared online. Facebook was launched in 2004 and Twitter, in 2006. A few years later, in 2010, it was Instagram's turn. The latest and most widespread SNS among generation Z is TikTok, which launched in 2016.

With the world at our fingertips in the form of a smartphone with wireless internet connection, being connected with friends and family, sharing opinions, and pictures has never been easier. A few taps of our fingers, and in a few seconds, we have over a million results from Google. Platforms like Twitter, Facebook and Instagram have made it possible and incredibly easy to connect with friends and family and share updates about our personal lives.

Humanity has never been more connected than now. Yet is that really a good thing?

1-A. Generation Z

Generation Z is the first generation to grow up with the internet. This generation does not remember a time without the world wide web and cell phones.

In 2018, the Pew Research Center defined Generation Z as anyone born after 1996. "They are the youngest, most ethnically diverse and largest generation in American history, comprising 27% of the US population. Gen Z grew up with technology, the internet, and social media, which sometimes causes them to be stereotyped as tech-addicted, anti-social, or "social justice warriors." (Meloa, 2022) This year, the oldest of the generation are turning 25.

1-B. Generation Z and the Internet

older generations do watching television.

According to an Insider Intelligence study, the social network apps most used by Generation Z are Snapchat (42.0 million users), TikTok (37.3 million users), and Instagram (33.3 million users). More specifically, the top social networking sites among older generation Z members (young adults ages 18 to 25) were Snapchat, Instagram, Discord and TikTok (Petrock, 2021). They also argue that "Gen Z's habits will evolve as its members age. Within a few years, Gen Z users who expressed a strong preference for, say, Instagram, or TikTok might find themselves being frequent Facebook users." (Petrock, 2021)

On average, members of generation Z receive their first phone just before their 12th birthday, communicate mostly through social media and text messages, and spend as much time on their phones as

This is a generation that is always connected. In 2017, the IBM Institute for Business Value conducted a global survey of 15,600 Gen Zers between the ages of 13 and 21. When asked about how they spent their free time, 74% of respondents said they spent time online. The same survey found that the top choice of smart device among Gen Z are mobile phones (79%) and laptop computers (45%) (IBM Coporation, 2017). Megan Halscheid, vice president of marketplace intelligence at Publicis Media said "Gen Z looks at entertainment differently. They consider scrolling through TikTok as a form of entertainment, and that's almost competing with some of the network content that's being put out there. It's personal and it's

self-programmer, and they want to see content that reflects them and their likes and interests" (Faughnder, 2022). Data from 2018 has shown that users switch on average 101 times per day between apps (Deng et al, 2018).

The typical young adult of Gen Z spends an average of 7.2 hours watching video a day, according to market research provided exclusively to the Los Angeles Times (Faughnder, 2022). The author speculates that, assuming people sleep the recommended eight hours a day, individuals spend nearly half of their waking hours on their phones. And, according to a survey done by Rhyme & Reason, commissioned by Vevo and Publicis Media, Gen Z viewing habits change throughout the day. They will start on TikTok or Instagram in the morning, switch to YouTube around midday, and finally, end the day on Netflix or Hulu (Faughnder, 2022).

1-C. Burn Out

Burn out is defined by Psychology Today as a state of emotional, mental and physical exhaustion, often caused by prolonged or repeated stress. It is often caused by issues at work, but it can appear in other areas of life as well, such as family, friendships, and romantic relationships (n.d). Symptoms of burn out include feelings of anger, irritability and cynicism.

Research also shows that excessively using social networking sites leads to social media fatigue, tiredness and burn out (Liu and Ma, 2018). Other research (Matthes, Karsay, Schmuk and Stevic, 2020) have also found that the use of SNS and smartphones can lead to burn out.

1-D. Media literacy skills

Media literacy is a concept which describes how individuals access media, understand media content and, and create their own messages. (Buckingham et al., 2005). Renee Hobbs describes media skills as the ability to "make responsible choices and access information by locating and sharing materials and comprehending information and ideas; create content in a variety of forms, making use of language, images, sounds and new digital tools and technologies; and reflect on one's own conduct and

communication behavior by applying social responsibility and ethical principles" (Hobbs, p. vii-viii, 2010).

Media literacy skills are more relevant to traditional media (such as television, film, newspapers, and books) than to new media (digital platforms in which users can share any content, such as Twitter, Instagram, Facebook and TikTok).

With new media technologies emerging in the beginning of the 21st century, and with new types of social media being created every year, "traditional media literacy is no longer sufficient for an individual to completely survive in this new media ecology" (Lin et al., p. 3, 2013). It requires both technical and thinking skills from users, such as creating accounts and judging and interpreting the content consumed in these platforms (Lin et al., 2013). Media is not just shaping our culture, it is our culture (Wu and Chen, 2007).

New media literacy emphasizes more on the production and participation in media rather than only consumption (Luan et al., 2020). In a 2013 research, Lin et al defines new media literacy by the following indicators: consuming skills, understanding, analysis, synthesis, evaluation, presuming skills, distribution, production, participation, and creation.

New media literacy is important today because individuals are constantly contacting and interacting with each other by the consumption and creation of media content in social networking sites (Koc & Barut, 2016). Celik, Muukkonen and Dogan argue that "given that people produce and consume more media messages by using social media for communication", a higher usage of social networking sites may improve social media literacy (p. 3, 2021). Additionally, Yildiz, Durak and Saritepeci (2019) emphasize that social media environments have a high potential for individuals to develop new media literacy skills.

Celik, Muukkonen and Dogan (2021) found that social media use in general and interactional use of social media contributes to an increase in new media literacy skills, and that "individuals who use social media for sharing their thoughts and maintaining contact with existing friends are more likely to become

new media literate (p. 6, 2021). However, others seem to disagree. In a 2016 article for Forbes, Leetaru writes "even digital natives have grown up in the information-saturated online world do no better at discerning the credibility of information or even understanding the most basic concepts".

The question here is: how does the amount of time this generation spends online affects in offline lives and their media literacy skills?

2. Research Questions

RQ1: How does prolonged time spent on social media affect new media literacy skills in Generation Z?

RQ2: What are the effects of prolonged social media use in Generation Z?

3. Methodology

Two methodologies were used during the research of this project.

3-A. Focus Group

The focus group interview was conducted with individuals of the target audience (Generation Z, between 18 and 25 years old, born between 2004 and 1997) to better understand their internet and social media networking sites behavior. The ideal size for this focus group is around 10 people. The sample used for this focus group was a convenience sample.

This interview consisted of 8 questions, ranging from why participants use social media, how long they spend online each day, and how they feel about certain behaviors such as curating their experience online, and if spending too much time on social media affected them in their "offline life."

3-B. Online Survey

The survey, like the focus group interview, aimed to understand the behavior of Gen Z when it comes to their time online and on social media more in depth. Like the focus group, the target demographic of this

survey was individuals between 18 and 25 years old, born between 2004 and 1997. The sample of participants used for the survey was also a convenience sample. This survey was created in Qualtrics and posted and distributed through Instagram and word of mouth.

The survey consisted of 17 questions. Some of the questions were similar to the focus group questions but asked for more specific details. Participants were asked why they use social media, how long they spend online each day, what some of their behaviors are – for example: do they reply to posts on social media? –, and if participants thought they learned skills on social media that they could apply to their lives off the internet. The ideal number of responses to the survey is around 100 responses or more.

4. Results

4-A. Focus Group

Participants were either in college or working jobs that required extended time on a computer and connection to the internet. Due to the nature of their occupations, they spent on average around 6 to 8 hours on the internet and an additional 2 to 4 hours on social media and streaming platforms (such as Netflix and Hulu) during their downtime. Only one participant said they did not spend more than an hour or so on social media. The top social media apps used were Instagram, Twitter and TikTok. Additionally, one participant shared they used dating apps constantly throughout the day. The main reasons for using social media were entertainment and connecting with friends and family, with one participant using social media apps for work and networking and one participant saying they use it to learn new things.

Two questions of the interview were about the participants' personal experiences on social media. All participants admitted to feeling some kind of burn out after being on social networking sites for too long, but their definitions of burn out varied. Two participants describe feeling burned out by comparing themselves and their experiences to other people in their feed. Two participants have feelings of fear of missing out, or FOMO, which makes them be connected for very long, which causes burn out. Yet another participant says they feel burned out from using social media passively. They find themselves

scrolling infinitely when they either do not have anything else to do or when they do have other things to do but want to avoid them. One last participant says they feel burned out by the overwhelming exposure to personal opinions from other people.

Finally, participants agreed that spending too much time on social media has positive and negative effects on people. Positive effects include learning how to respect what others have to say and when to not engage with people if they believe it's not worth it or if it will create a bigger fight, as well as other skills. The negative effects are that not everyone has this perspective, and some people believe they can say whatever they want online because of anonymity; people do not respect that everyone can have their own opinion.

Participants said that they believe most of Gen Z is not spending so much time online that they completely warp their worldview. They believe most young adults have awareness of when they need to disconnect and spend time socializing with friends and family and can separate their experiences online from their experiences in the offline world.

4-B. Survey

The survey was conducted through Qualtrics. It was distributed by Instagram and word-of-mouth and received a total of 68 complete answers. The total number of forms accessed was 91.

The purpose of this survey was to better understand the social media habits of Generation Z, understand how it affects their online and offline lives, and to explore whether they believe using social media affects their media literacy skills at all or not.

Of the total respondents, 75% were women and 25% were men. Participants of the survey are all part of Generation Z, with 34% being 18 to 20 years of age, 31% 21 to 23 years of age, and 33% between 24 and 25 years of age.

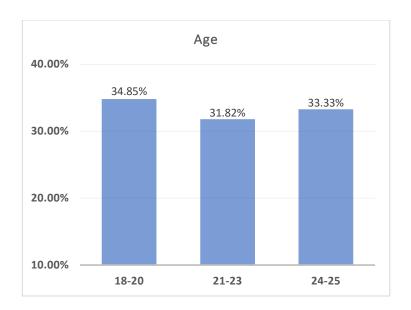


Chart 1. Participants' age. SD = 0.83

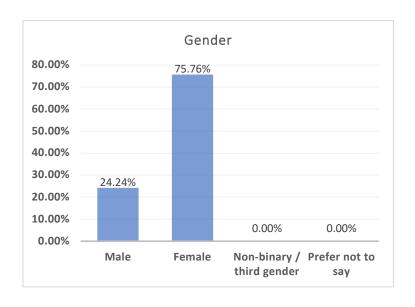


Chart 2. Participants' gender. SD = 0.48

Participants of the following countries were invited to respond to the survey: United States, Brazil, Mexico, United Kingdom, and India.

This survey found that 27% of respondents spend 1-2 hours on social media, 45% spend 3-4 hours and 26% spend 5 hours or more on social media (SD = 0.74).

Three tables were created to compare the social media usage time between men and women, age, and ethnicity. These tables were included to allow for an initial validation of the data and its representativeness regarding the profile of the respondents.

Table 3 shows the hours spent on social media by gender. The number of male respondents is notably smaller than the female respondents, with only 3 not identifying their gender. This is also illustrated in Chart 2. Although at first glance female respondents seem to spend more hours on social media apps, we cannot confirm it from the data since there is no clear mathematical trends in either group.

How many hours per day (approximately) do you spend on social media apps?		3-4	5 hours or	
	1-2 hours	hours	more	Grand Total
	1	1	1	3
Female	11	25	13	49
Male	7	5	4	16
Grand Total	19	31	18	68

Table 1. Social media use by hour and by gender.

Table 2 represents the hours spent on social media by age. It is noticeable that the numbers of hours by age is very well distributed, showing that age of respondents is not a factor in the number of hours spent on social media apps.

How many hours per day (approximately) do you spend on social media apps?				
			5 hours or	
	1-2 hours	3-4 hours	more	Grand Total
	1	1	1	3
18-20	7	11	5	23
21-23	5	10	6	21
24-25	6	9	6	21
Grand Total	19	31	18	68

Table 2. Social media use by hour and by age.

Table 3 displays the hours spent on social media by ethnicity. The largest represented groups are Hispanic/Latino, White and Asian. It is worth to note that among all groups, Asian tend to spend less time on social media apps. This factor might be important in the discussion about social media burn out present further ahead in this work.

How many hours per day (approximately) do you spend on social media apps?				
	1-2 hours	3-4 hours	5 hours or more	Grand Total
	1	1	1	3
Asian	6	1	1	8
Black or African American		2	1	3
Hispanic and/or Latino	8	12	10	30
Other		2		2
White	4	13	5	22
Grand Total	19	31	18	68

Table 3. Social media use by hour and by ethnicity.

By taking into consideration the data analysis above, we can assume that gender and age differences do not play a significant role in the analysis of the group responses.

The following charts expand the discussion on the results collected from the survey.

A) Reasons for using social media

The biggest reason why respondents use social media was for entertainment (35%), to connect with friends and family (25%) and for leisure (20%).

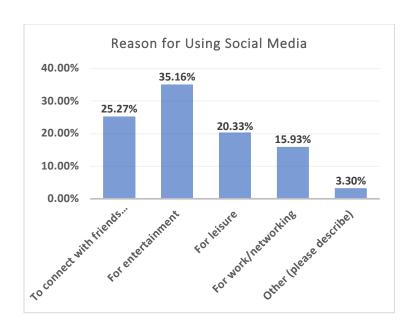


Chart 3. Reasons why participants use social media.

B) Social media burn out

In this study, it is considered that the respondents are subjected to some degree of burn out if they responded either "About half the time", "Most of the time" or "Always". When adding the percentages relative to these three options, 52% of the respondents can be considered under a significant form of burn out. 42% of respondents said they feel burned out by social media sometimes. Overall, the two ethnicities that feel the most burn out by using social media were Hispanic/Latino and White. The ethnicity that felt the least burned out was Asian and this may be related to their lower exposure to social media apps as presented in Chart 5. The main reasons for feeling of burn out were scrolling passively for too long (31%) and comparisons to others (20%).

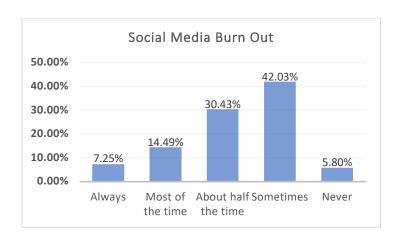


Chart 4. Frequency of social media burn out. SD = 1.01

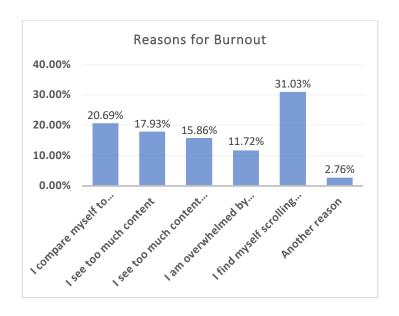


Chart 5. Causes of social media burn out.

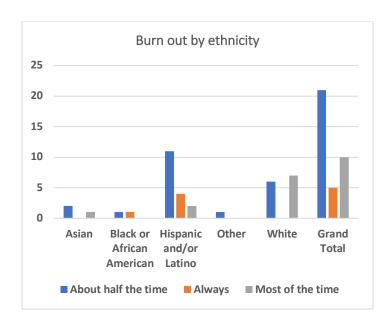


Chart 6. Frequency of social media burn out by ethnicity.

C) The effect of social media on people's perspectives

When asked if participants believe that spending too much time online on social media affects people's perspectives and behaviors in their offline lives, almost 96% said yes (SD = 0.49). In turn, when asked if they believe that it affects their own perspectives and behaviors, 66% said yes and 14% said maybe (SD = 1.06). This may be because people tend to look at others more objectively than they look at themselves, but also because they may tend to judge others more harshly than themselves.

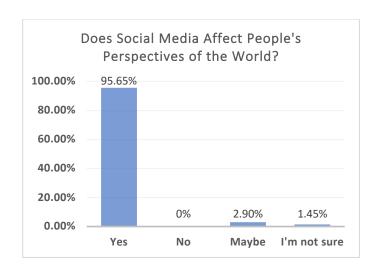


Chart 7. Participant's answers on whether social media affects people's perspectives of the world. SD = 0.49

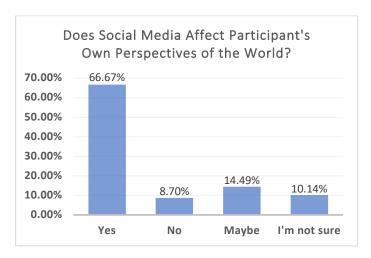


Chart 8. Participants' answers on whether social media affects their own perspectives of the world. SD = 1.06

D) Social media learning skills

Finally, participants were asked if they believe that they learn skills using social media that they can apply in their real life. 78% responded yes, with 18% responding that they are not sure (SD = 0.79). 68.8% of men said yes, and 18.8% said maybe. 84% of women said yes, and 16% said not sure. Additionally, all age groups agree that they learn skills using social media that they can apply in their real life.

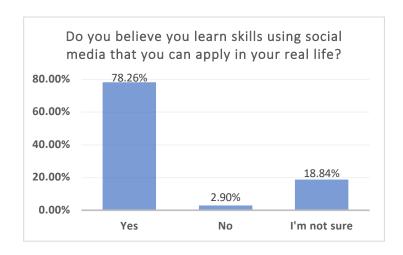


Chart 9. Participants' answers on whether they believe that they can learn skills using social media that they can apply in real life. SD = 0.79



Chart 10. Participants' answers on whether they believe that they can learn skills using social media that they can apply in real life, split by age group.

Sixty percent also said they believe that actively participating in social media increases their media literacy skills (SD = 0.91). Both men and women had similar views on this question; additionally, participants of all age groups had similar views on this question.

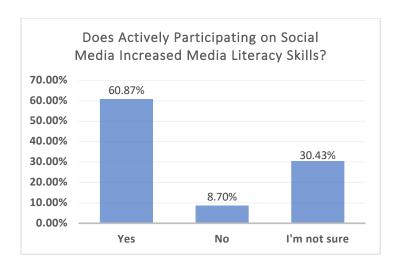


Chart 11. Participants' answers on whether they believe actively participating on social media increases media literacy skills or not. SD = 0.91

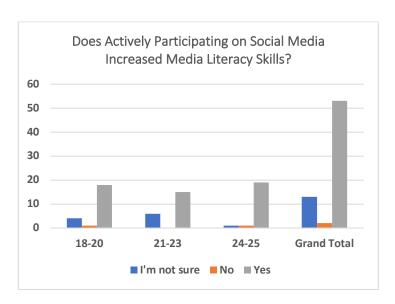


Chart 12. Participants' answers on whether they believe actively participating on social media increases media literacy skills or not, split by age group.

Of the new media literacy skills defined by Lin et Al (2013) (which include consuming skills, understanding, analysis, synthesis, evaluation, presuming skills, distribution, production, participation,

and creation), 29% of participants said they believe their analysis skills were increased, 27% said their understanding skills were increased, and 18% said their evaluation skills were increased.

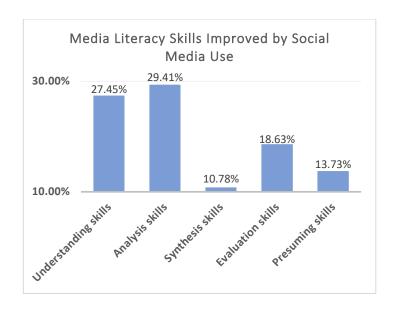


Chart 13. Participants' answers on which skills they believe were improved by social media

5. Discussion

This survey presented three main findings.

The first finding points to the fact that the survey data is reasonably homogeneous in terms of responses. It leads us to assume that Generation Z (at least in the surveyed individuals) is a pretty homogeneous generation. Regardless of age and gender, results show that participants have a similar point of view in the questions asked. This assumption can be illustrated by tables 1 and 2, where there is no significant difference in hours of use between participants aged 18-20, 21-23 and 24-25, or gender. This assumption will guide the remaining data interpretation in this work. It is also noticeable the high average number of hours spend on social media apps by the surveyed participants which is supported by literature (Faughnder, 2022).

The second finding is that regardless of gender and age, participants in general believe that using social media teaches them new skills and over 60% believe that participating increases their new media literacy. We cannot ignore that about 30% of the respondents are not sure about the contribution of social media to their media literacy.

When we break down the types of skills according to chart 13, they recognize that the skills development is stronger in the areas of interpretation (understanding skills) and analysis. These results are typically associated with a passive use of social media. When analyzing chart 3, a significant part of the motivation for using social media is for entertainment (35%) and for leisure (20%). They can also separate other's opinions from their own and formulate their own beliefs with little influence.

The more demanding and elaborate skills (synthesis, evaluation and presumption) are recognized as less exercised due to a largely passive use of social media.

It should also be noted that, according to 95% of the respondents, social media has the potential to change people's perspectives of the world (chart 7). Interestingly, almost one-third of the respondents are not sure social media changes their own perspectives of the world (chart 8). In other words, part of the respondents believe they might have better "filters" on the content interpretation than the general population and might feel they can be less influenced by social media content.

It was slightly surprising to learn that participants believe they learn skills while using social media that they can use in their lives as shown by chart 9. While this was brought up during the focus group interview, it was not expected that this view would be shared by a wider pool of participants.

It is possible to interpret that Generation Z has a pretty objective view of social media and are aware that it can affect not only other people's perspectives of the world, but their own as well. While this particular survey did not explore exactly how social media can affect participants' behaviors in the offline world, they were aware that in general social media causes a certain burn out, and they are also aware of what causes this feeling.

As a preliminary conclusion, the data suggests that extensive use of time on social media increases new media literacy skills according to the perception of the studied group. It appears that the improvements are more significant in the areas of interpretation (understanding skills) and analysis.

The third finding is that over 52% of the respondents felt they are subjected to burn out when using social media. This percentage considers all cases where respondents fell burn out half of the time or more. It is also important to remark that in general, participants who identified as Asian use social media less hours per day compared to Hispanic/Latino and White participants, as seen in table 3. When we link this data with those in Chart 6, we learn that Asian participants feel much less burned out by social media than Hispanic/Latino and White participants. This insinuates that the more time an individual spends on social media, the more they can feel burned out, while less time online will cause less burn out.

Based on the data, it can be argued that the more time an individual spends on social media, the more they acquire new media literacy skills; at the same time, the more burned out they feel. Conversely, spending less time on social media lessens the feelings of burned out but it also lessens the new media literacy skills they can learn.

Chart 5 demonstrates that the reasons for burn out are varied among the respondents.

While the prolonged social media use seems to contribute to improvement of skills and new media literacy of the Generation Z, a significant negative effect is that individuals become prone to burn out and social anxiety.

6. Limitations and Further Research

The biggest limitation on this research was the pool of participants who answered the survey and participated in the focus group interview. Participants were not filtered, other than by their age group.

Thus, they were from similar backgrounds, ranging from college students to young adults beginning their careers. This created a reasonable lack of diversity in their experiences.

The research also did not focus on the specific countries of the participants of the survey, and only looked at the oldest of Gen Z as a whole.

Lastly, this particular survey did not explore how members of Generation Z increase their media literacy skills; it focused more on whether it does increase or not.

Further research should expand the demographics, increase the amount of data, and look more specifically where participants are from and how this affects their social media habits and should also study how media literacy skills are improved – or not – by social media use.

7. Conclusion

Gen Z spends much of their day online, watching videos, chatting with friends, and creating video, text and photo content, but they can still learn general skills and develop their new media literacy skills.

This research is in line with previous research such as that from Celik, Muukkonen and Dogan (2021), proving that social media use in general contributes to an increase in new media literacy skills.

Additionally, it contradicts Leetaru's 2016 Forbes article in which he writes that digital natives, who grew up in an information-saturated online world, cannot understand basic concepts of communication.

Finally, this research shows that feelings of burn out in Generation Z is related to the amount of time they spend online and constitutes an important negative effect in their new media learning process.

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