A Study of the Impact of Information Overload in Social Media in the Simple Medium Network

- The Case of the University Students Majoring in Communication Studies

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Abstract: Social media has grown rapidly in recent years, and in the current context of growing social media addiction and information overload, it is urgent and important to study the impact of information overload on young people. Social media is closely linked to the daily lives of young people, and the problem of information overload can induce various conflicts and problems. It directly affects the development of individuals. While previous research has highlighted the negative effects of information overload on people's mental health, this paper focused on the subjectivity of social media users. The study used in-depth interviews with a sample of 10 current university students majoring in media. An understanding of their perceived information overload and attitudes was obtained. The findings suggest that while information overload creates an 'information wall' and offers more possibilities to see the world, social media subjectivity can be very powerful. However, the subjectivity of social media users can be a good way to deal with the effects of information overload and make good use of it. This study extends the research on this issue and highlights the subjective nature of social media users.

Keywords: information overload, social media addiction, user subjectivity

1.   Introduction

Social media addiction and information overload have become social issues of concern in the Z-era. With the advent of the Internet era, emerging media are gradually replacing traditional media, especially with the rise of digital media people are gradually relying on social media. However, the problem of information overload caused by the abundance of information cannot be ignored. This study uses in-depth interviews to analyse the impact of information overload on university students majoring in media, and the subjectivity of social media users. It is attempted to analyse whether information creates more information cocoons or helps people to broaden their horizons? Can social media users play a subjective role in dealing with the effects of information overload? These questions have important implications for the development of social media and people's mental health issues.

2. Method

To study the effects of information overload on social media and its shaping effect on young people, this study adopted the in-depth interview method of qualitative research, because it is better at describing the process and interpretation [1]. Plus, some questions are private. The one-to-one interview let interviewees speak out their opinion freely and comfortably, as a result, the researchers can obtain ideal data. Ten media-majored students from different universities were interviewed with eight questions. The interview questions cover the basic cognition of information overload, the influence of information overload, and personal views. The interviews were conducted through WeChat and voice calls (subject to the respondents' personal wishes). The interview was recorded in the form of screenshots and audio recordings and summarized into words. Each person was interviewed for between half an hour and 40 minutes.

The interview questions included basic usage of social media, experience of information overload and views on information overload. The interview included the following eight questions:

What social media do you usually use?

Do you use social media a lot? What is the average time per day?

What do you usually pay attention to?

Do you ever feel information overload?

If so, what kind of information overload do you have? How do you feel about information overload?

How is information overload affecting you? (Such as affecting life, psychology)

How do you deal with information overload? Would you choose to uninstall social software?

Just tell me from your own personal experience what you think of the wealth of information on social media.

3. Result

The following study results are presented.

3.1. The Use of Social Media

Table 1-3 show the summary of questions 1-3.

Table 1: Answers to question 1.

Frequently used mass media	Little Red Book	WeChat	Sina Weibo	TikTok	Instagram
Number of people	6	5	5	5	1

Table 2: Answers to question 2.

Time to use social media	Less than 2 hours	2 to 5 hours	5 to 8 hours	More than 8 hours
Number of people	2	3	2	3

Table 3: Answers to question 3.

Social media content that interviewees follow	U&G1: Information	U&G 2: Personal Identity	U&G 3: Integration & Social Interaction	U&G 4: Entertainment
Number of people	9	1	4	10

Almost all of the interviewees follow social media for social hotspots and content of interest to them, and through this they are informed and entertained.

3.2. Information Overload on Social Media

Table 4 and 5 show summary of questions 4-5.

Table 4: Answers to question 4.

Perceived information overload	Affirmative	Neutral	Negative
Number of people	7	1	2

Most of the interviewees had felt information overload.

Table 5: Answers to question 5.

Attitude to information overload	Affirmative	Neutral	Negative
Number of people	1	1	7

In summary, respondents' information overload comes not only from information they follow and are interested in (e.g. fitness, beauty), but also from hot content on online media, such as social hotspots, popular content, celebrity hotspots, etc.

The vast majority of attitudes were negative, with one interviewee demonstrating a positive attitude.

3.3. Personal & Information Overload

Table 6 shows the summary of questions 6-7.

Table 6: Answers to question 6 & 7.

Level of impact	Large extent	Little extent	No effect
Number of people	2	5	2
impact	Affective	Negative	Both positive and negative
Number of people	0	6	1

The results of the collated interviews show that, on social media has less impact on the lives of the interviewees and more on their psycho-emotional well-being. Seven of the interviewees said, overload can cause them to feel anxious and restless. Two interviewees indicated that the information did not affect them.

For Question 7, four of the interviewees would choose to uninstall the software; one would choose to block the information, and four would not.

3.4. Informative Views

Table 7 shows the summary of questions 8.

Table 7: Answers to question 8.

View	Affective	Negative	Both positive and negative
Number of people	2	3	4

The positive views expressed in the interviews acknowledge the convenience offered by social media information. The entertaining and biased nature of information dissemination was also raised.

4. Discussion

Most of the results are consistent with the hypothesis that information overload on social media influences people and shapes them to varying degrees.

However, the results also reflect that there are limits to the role of information on social media because audiences are highly independent. While information has created an Information Cocoons, it has helped open people's eyes to a greater extent.

The choice of social media used by the interviewees can be found. Interviewees are more likely to choose emerging media. In the case of the Internet in the same proportion of users use Little Red Book, WeChat, MicroBlog, TikTok and less Instagram.

4.1. Most of the Interviewees Suffered from Severe Social Media 'Addiction'

The vast majority of interviewees spent more than 142 minutes using social media. (According to Statista's latest Digital Economy Compass data, the average global Internet user will spend 142 minutes per day using social media platforms in 2021.) Six of the interviewees used more than four hours per day on average, and three of them even exceeded nine hours.

By analyzing data from Kuwait institution, a public institution in the Middle East Gulf area, the study contributes to the body of literature [2]. According to the findings, between 75% and 100% of students say they are addicted to social media [2]. 80% of college students who believe they are social media addicts claim to access social media and/or streaming websites 11 or more times every day [2]. Most university students are dependent on social networks. According to research on social networking site (SNS) intensity in Turkey, a tiny percentage of young people may become addicted to using new technologies excessively [3]. A person's perceived well-being declines when they use smartphones frequently, which is linked with high SNS intensity [3].

4.2. The Information That the Interviewees Focused on Was of Interest

The three aspects of UG theory, information use, social use and entertainment use, are reflected in these responses. In particular, the two aspects are information access and entertainment. The audience chooses a particular medium and content to start using. The reasons people use and are available on social media vary, and disposition has a significant impact on how each person chooses to use and be available on these platforms [4].

4.3. Social Media Users Are Independent and Autonomous

Two interviewees did not perceive information overload on social media; most of the other relevant information was also received in a cursory manner in an entertaining and fragmented form. This may be because the interviewees viewed information on social media with the mindset of seeking entertainment or supplementing fragmented knowledge (U&G 4: Entertainment) and did not use them as aspects of U&G 3: Integration & Social Interaction or U&G 2: Self Identity. (A8: Not at the moment. I'm quite receptive and I usually focus on what I'm interested in, so I think the more I know, the better. Also, I don't have a very good memory, so I forget some things, especially things that I'm not interested in. So I just accept what I want without feeling overloaded.)

Information overload may be related to the need for and dependence on information on social media, and U&G theory suggests that prolonged and frequent social media use is motivated by a psychological need. The richness of social media provides people with a sense of satisfaction, which reinforces their motivation to use social media and creates psychological and behavioral dependence. (A9: I feel it. Checking social media every day is a little numb. Sometimes even updating becomes a mechanical behavior.) Social media usage habits and audience content engagement are linked [5]. User preferences can be recorded when analyzing social media activity logs because users share their personal views on social media [5]. Personalised search can produce limited search results by only taking into account user tastes [5].

Collating the data shows that there exist social media users who are neutral about the existence of information overload. (A10: That's fine. I'll screen it.) This indicates that social media users are independent and autonomous, have critical thinking, and are not completely influenced by media messages. At the same time, this can also reflect the uncertainty of the effect of agenda setting in the new media environment. It reflects the limited effect of media communication.

In summary, the interviewees experienced information overload not only from the information they were concerned about, but also from the content of social hotspots. (A2: I am bored with some vulgar social and livelihood news.)

Agenda setting theory mentions that mass media often cannot determine people's specific views on a certain event or opinion, but can effectively sway people to pay attention to certain facts and opinions, and the order in which they discuss the issue by providing information and arranging related issues.

Information overload and mixed messages reduce people's trust in information on social media. (A1: The most direct feeling is the information overload in public opinion. It makes me feel that the development and updating speed of public opinion information is too fast, which easily leads to the wide spread of rumors and the loss of credibility of official media or government. Especially in the case of public emergencies, the previous incident in Qingyuan, Guangdong has been in my mind for a long time.)

The vast majority of attitudes were negative, with one interviewee demonstrating a positive attitude. (A5: More information can open my eyes and solve many of my problems.)

Human decision-making is subject to the biological limits of cognition [6]. Users frequently feel information overload as a result of the fluidity with which content spreads on online social media [6]. This in turn influences which information people get is processed and receives a response, placing restrictions on the number of information cascades and involvement in them [6]. (A4: My personal feeling is that there may be an overload of information in the social hotspot category, such as an event or someone in the event is on fire, and then all kinds of media will flock around this hotspot. Sometimes I just find it too much and too annoying, and will be able to avoid such (with this hotspot tag) information, or even get a bit bored when I see it).

4.4. Information on Social Media Has a Greater Psycho-emotional Impact

Collating the results of the interviews shows that the information on social media has less impact on the lives of the interviewees and more impact on psycho-emotional. (A6: The competition between the desire for knowledge and the impetuous mind leads to anxiety. Frankly speaking, the balance between wanting to play and wanting to learn is not well balanced. A7: You will have anxiety and pessimism and then make some adjustments to your life. If you can't adjust it, you will simply collapse.) Only information overflow had a significant impact on emotional fatigue, according to a study of 249 university students who used social media excessively [7]. Information overload, communication overload, and social overload all favorably impacted technological stress, the research found [7].

Also, the interviewees' experiences are very typical of Framing Theory's description. All language use encourages a particular response. information affects people's attitudes and behaviors to some extent. （A3: It will affect my learning attitude. In the past, if I wanted to study a film deeply, I would go to see the director's life and creation experience. However, there are too many movie overview and in-depth analysis on social media. Nowadays, in order to save time, people will choose to watch a movie overview of more than ten minutes. It seems to be an effective use of time.）

With 3.8 billion users globally, social media use has ingrained itself into society [8]. While studies have demonstrated that using social media can have benefits (such as a sense of social connectivity and wellness), much of the attention has been placed on the detrimental effects of excessive usage on mental health, such as greater levels of melancholy and anxiety [8]. Numerous studies have shown how chronic usage of social media might harm teenagers' ability to learn, social conduct, and interpersonal relationships (A7: Psychologically, it will create anxiety and pessimism, and then make some adjustments to your life situation. Maybe if you can't adjust, you'll just swing for the fences.)

Perceptual overload positively affects the passive usage intentions of mobile social media users. Perceptual overload positively affects the passive usage intentions of mobile social media users [9]. (A9: The impact on life is okay, but psychologically, there is a frequent desire to open social media to get information, but it is indigestible.)

4.5. The Great Majority of People Actively Participate in Information Avoidance Behaviors and Actively Deal with Information Overload

After the analysis of the interviews, the vast majority would take the initiative and engage in information avoidance behavior to actively deal with the information overload. Only one interviewee chose not to deal with it, based on the rapidity of information change. (A7: I don't deal with it because after a while the information will be replaced. I will not.) Information overload's impacts on information avoidance behavior are partly and completely mediated by social media exhaustion, which also serves as a mediator between the two [10]. Additionally, the impact of social network fatigue on knowledge avoidance behavior is strengthened by time constraints [10].

The number of people who chose to uninstall software, with the intention of media disruption, was the same as those who chose information avoidance behaviour. Media use and gratification theory based on theoretical framework: whether gratification or not will affect the subsequent media choice use behavior and change the expectation of the media to varying degrees. Whether and to what extent there is information avoidance is related to the audience's needs and expectations of the media.

Positive perspectives in the interviews acknowledge the convenience that social media information brings. The entertaining and biased nature of information dissemination was raised. (A3: Nowadays, there are really not many people who do serious content on social media, most of them

follow the trend, chase hot spots, rub the traffic, etc. But in the era of entertainment, these information without content output will still cause the public to revel in it, while some information that really needs attention and dissemination will still go unnoticed. I hope that social media will not become "tittytainment" in the future.)

5. Conclusion

This research adopted interview as a primary data source, and answered questions about the effects of information overload on people, their subjectivity in it and their coping behaviour.

This study still has some limitations. Firstly, there are the methodological limitations of the study. The interviewees were mostly of the same age, profession and region. The results of the interviews can be subjectively influenced by the interviewer. The authenticity of the answers can be affected by the fact that the interviews are direct contact between the two parties. Time constraints more research methods. This study had limited access to a limited number of interviewees and limited access to the study. If further studied, the case of information siege could be analysed in depth and "infiltrated" into the group of university students majoring in media.

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