

Exploring the Influence of Information Cocoon on the Mental Health of Social Platform Users

Jiaxi Shi^{1,a,*}

¹*Guangdong Country Garden School, Foshan, Guangdong, 528000, China*
a. wwynn53770@student.napavalley.edu

**corresponding author*

Abstract: Today, with the rapid development of the information age, the network has become almost everyone's "habitat". While social media and the Internet bring users the pleasant experience of quick access to information, they also produce information cocoons. When users are still "swimming" in the "ocean of interest" created by big data, they are already unknowingly surrounded by limited and biased information. This paper will focus on the popular social phenomenon of "information cocoon" and explore its impact on the mental health of social platform users. The information cocoon includes the user's automatic habitual information search and network big data analysis push under the guidance of their own interests. The combination of the two has successfully established a perfect "interest barrier" for users. When people are passively, actively or unconsciously imprisoned in the information cocoon constructed by the combination of personal reasons and external reasons for a long time, they will not only lose the motivation to understand and contact different information, but also due to the reduction of communication between different interest groups, the characteristics of alienation between groups become more and more obvious, forming a closed information space "information cocoon". When trapped in the information cocoon, the user's emotional and psychological care is guided and affected by the "barrier", and its emotions are easily driven by the information content, which is difficult to realize and jump out of.

Keywords: information cocoon, mental health, social platform users

1. Introduction

The concept of information cocoon was first proposed in the book *Information Utopia* written by Keith R. Sunstein, who mentioned that when information is disseminated on the Internet, users' needs for information are not comprehensive, so they only focus on choosing the information field that pleases them or interests them [1], and rarely actively try to search for other information. For a long time, the breadth and depth of the user's own access to information will be increasingly limited, and thus "imprisoned" in a cocoon-like closed space. According to Sunstein, the necessary condition of information cocoon is "echo chamber effect", and "group polarization" is the possible result of information cocoon in the long run. The echo chamber effect is defined as a community of like-minded people on the Internet who receive only content that reflects their views, thus largely limiting communication among groups that do not align with ideology [2]. Group polarization means that after the real formation of the cocoon, the spirit and thought of the users themselves have been affected,

and there may be disputes and disputes between people due to the information difference caused by the “information barrier”, which also indicates that the information cocoon may eventually lead to irrational behavior and make the social atmosphere become chaotic.

In the era of the Internet, the rapid development of algorithm technology makes personalized recommendation on various social platforms more and more popular, so that many online platforms quickly launch “daily/weekly daily news” and “personalized recommendation” tailored to users’ personal preferences, helping users to find and choose topics they are interested in more quickly in the massive network information. In this process, the platform has shown a trend of constantly catering to the needs and interests of the audience [3]. While users enjoy this convenience brought by the platform, negative effects also come with it. In addition to the information barrier created by the active or passive, the information obtained by the user becomes more and more limited, but also lead to some users’ psychological and emotional ups and downs more easily and be mobilized. Therefore, through the analysis of existing literature and research conclusions, this article will find out the factors that affect the mental health of platform users in the information cocoon and the solutions.

2. The Impact of Information Cocoon on Users

2.1. Decreased Concentration

A large number of we-media platforms are the easiest place to form an information cocoon. When the fragmented information led by short videos and marketing accounts gradually occupies our lives and everyone is still cheering for the diversification of information, we do not know that such information is distracting and eroding our attention a little. The information inside the barrier is not only limited, but also fragmented and fast food. When users contact this kind of information for a long time, they will become dependent on the simple and easy to understand fragmented information, and thus they will reject and escape the non-fragmented information encountered in life, study and work. Escape psychology is a manifestation of seeking benefits and avoiding harm, and its harm lies in the fact that the avoiders themselves are easy to become addicted to it and become dependent on it. As long as they feel uncomfortable, they immediately flee the problem to find solace, and are not willing to spend time to understand and experience. Over time, they will not be interested in things in life or it is difficult to ensure concentration when doing things, and they cannot think deeply when looking at things, only staying on the surface analysis, unable to grasp the core of their essence.

A decrease in concentration can also manifest itself in a loss of time. The emergence of short video platforms also makes it easy for users to fall into and immerse in shallow happiness that is extremely easy to obtain. In the short term, the information cocoon can allow users to enjoy the pleasure of being immersed in the “ocean of interest”, and the happy mood will form positive emotional feedback, so as to ensure the mental health of users. For a long time, not only will the information that users understand and access become very limited, but they will “lose themselves” in the fragmented and targeted information for a long time, forming a certain disconnect with the comprehensive social information. After disengaging from the information of interest, it is unable to respond to the information in other fields in a timely manner, resulting in escape psychology and affecting mental health.

2.2. Decline of Image Information Discrimination

Information cocoon will make an individual or a group of people actively or passively filter the information they are not interested in, resulting in the information they are exposed to may have a specific position, opinion or value. This kind of information and ideas can easily lead users to “preconceived” ideas and ignore other possible perspectives and voices. The formation of information cocoons reduces the ability of users to sift through the vast amount of information to check and react

to different views and voices. Due to the sensitivity of interested information, many users can only respond to or think about the information they want to know, so the deviation of information cognition and narrow thinking gradually form. When users are stuck in the information cocoon, they often have lost the ability to tell whether something is true or wrong. Many information disseminators often take advantage of the emotional, irrational and herd mentality of the public by using obscure or controversial words to incite the emotions of the information followers and then distort the truth of the event, thus causing certain negative effects on the psychology of users in the process of further deepening the information cocoon. Under the guidance of information disseminators, the public often loses the ability to judge and deny, and chooses to believe some distorted and false information. At the same time, in a closed information environment, because platform users cannot have an “omniscient perspective”, they lack an overall understanding of events, and are prone to blind conformity. Users who live in the information cocoon for a long time may even be unwilling to accept heterogeneous information, and may have unhealthy psychological emotions such as panic, anxiety, and so on under the constant self-suggestion. At the same time, behind the “personalized recommendation” hides the infringement of personal privacy. The platform computes the user’s usage habit data by mastering the user’s usage frequency, duration, preferences and other data, thus forming an independent and complete personal database [4].

2.3. “Cater to Another’s Pleasure”

In addition to the user’s independent interest choice, the passive push generated by big data to the user also wraps it in the information barrier. Nowadays, the “My Daily” and “personalized recommendation” functions prevalent on many network platforms are the information world tailored to users under the big data algorithm. The feeding of big data information makes users lack the right to choose information independently, and can only passively receive information as an audience, lacking the opportunity and desire to explore new interests. No matter how the content and events in the information pushed by the platform change, the vast majority of information that cannot be changed has the same point - the interest of the user. Affected by emotional preferences, users are more likely to focus on a certain type of information, which further aggravates the risk of tunnel vision and cognitive solidification [5]. No matter how much information is received, users are only listening to their own echoes in their own world. Networks that are supposed to expand our minds turn out to be cages that limit our spiritual world. Through research, it is found that the public is more willing to learn about events in the form of video information, picture information and sound information within a limited time [6], and the popular short video has met the needs of users to a great extent. Information disseminators will refer to the user’s forwarding, browsing and other records, favorites, likes and other behaviors, and use big data algorithms to “tailor” customized content for users, and pass information to users through personalized push. This kind of algorithm will directly lead to the information cocoon, so that the information content better meets the interests and preferences of the user. The mature application of algorithm technology also makes the push of information more regular and directional, which greatly reduces the opportunity for users to contact information outside their interest range, and promotes their information preference to be continuously strengthened.

2.4. Changes in Emotional Perception

When users are covered by the same type of information for a long time, a relatively closed and stable personal information space is formed due to the single form and type of information they receive [7]. In a previous experiment, one experimenter said that the more interesting information read, the later found that the entire page was interesting information, and no other types of information were seen,

which became the habitual emotion of the user [5]. Under the influence of habitual emotions, users are in a habitual and gentle information state for a long time, thus forming an information cocoon. In the case of emotional exhaustion, users will treat the existing information environment more negatively and be surrounded by homogenized information and values for a long time [8].

3. Suggestions

3.1. Build a Systematic Guidance Mechanism

The fundamental solution to the information cocoon is to enable each user to receive information equally and comprehensively. Only when diversified information is evenly and widely distributed on each user's social platform or software can they passively accept comprehensive and more diversified information without actively jumping out of the self-interest sphere [9]. However, the successful implementation of this method needs to rely on the active network guidance of major network platforms, standardized management of network platforms, and attention to any extreme speech or opinion expressed by users on the network [10].

3.2. Construct Diversified Information Receiving Channels

Network information is vast, such as the sea, however, users deep in the cocoon of information have gradually lost the ability to distinguish the truth of the time, so that they are more likely to be misled by wrong and distorted event information, emotions are more likely to be incited, resulting in mental health damage. Different from online platforms, traditional media have more strict and rigid standards in the process of disseminating information, and traditional media such as news reports and TV columns are more authoritative. In order to break through the information cocoon, it is necessary to establish a comprehensive and diversified information world for users, listen to the voices from different groups and the world, break cognitive narrowness and eliminate cognitive bias. Information push based on "My Daily" and "personalized recommendation" is easy to cause users' cognitive cocoon, therefore, traditional mass media should be committed to providing users with a variety of comprehensive information. For example, in the current era of media style integration, in addition to providing audiences with traditional news reports such as newspapers and TV stations, major platforms can also enhance the readability, vividness and richness of information through pictures, videos and other ways on their authoritative official websites, WeChat and Weibo.

3.3. Improve the Information Quality of the Network Platform

In order to break the information cocoon, improving the quality of Internet information is a very effective way. Online platforms should establish a more strict information review and control mechanism, allocate human resources rationally, and hire manual screening rumors and false information to improve the quality of Internet information. When the quality and diversity of information are guaranteed, many users will naturally step out of the information barrier and try to actively engage with knowledge and information beyond their own interests.

3.4. Be More Active in Social Activities

How to solve the problem of information cocoon from the root, that is, let users put down their mobile phones, leave the network "comfort zone", and enter the social life. Communication with friends can promote the interaction and communication between each other, and at the same time relieve the psychological loneliness and pressure brought by the Internet to users [6]. Learn to find good opportunities in life to release pressure and explore and cultivate interests, and reduce over-dependence on social platforms and networks.

4. Conclusions

The rapid development of the network provides users with a lot of convenience in receiving information, but it also promotes the emergence of “information cocoon”. Although the information is open and diversified, free flow, but the user for the information is closed, have a choice. The emergence of “information cocoon” also leads to the narrowing of the audience’s information, which is not conducive to the comprehensive development of individuals. Therefore, in the future research of Internet, the governance of “information cocoon” is particularly important. The emotional bias of the information cocoon is consistent with the dominant emotion of the platform. In order to let users break the shackles of the information cocoon, in addition to making users aware of themselves and actively escape, network platforms can also play a role in regulating users’ emotional orientation. The stability and balance of the network platform environment can also help users break through the information cocoon to a certain extent. As a network user under big data, in addition to the information cocoon created for individuals, the overall network environment can also make a certain group trapped in the constructed “public cocoon”. The push of big data on social platforms can subtly change the psychology and personality of users, and also determine to a certain extent what kind of information and emotional cocoons they are trapped in. Therefore, to break the cocoon of information, we need to rely on the joint efforts of individuals and society. In today’s information technology is so developed, it is believed that in the near future, more targeted “cocoon breaking” programs will be launched to solve the root cause of the negative impact of information cocoon on the mental health of platform users.

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