

The Role of Individual Initiative in the Recommendation Mechanisms of Chinese Social Media

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Abstract: An attempt to explore the role of individual user initiative in social media platforms popular in China such as Weibo and TikTok. Individual users' choices are flexible as well as directed on social media platforms. The methodology used in this paper is a questionnaire survey to collect user data for analysis. Options with mass characteristics as the main reason as well as other reasons such as news timeliness largely influence individual autonomy. The group attributes of the masses are also amplified on social media platforms. The phenomenon of group identity can also give rise to many derivative situations, sometimes favouring social harmony and sometimes obscuring much of the truth. In recent years, social media platforms have grown up, with countless topics emerging. But in many cases, the heat of a topic doesn't just come from the attractiveness of the topic itself, it can also be stacked up by the public's choices. To a certain extent, the phenomenon of mass identification influences the rise and fall of an event, and there are also people who take advantage of the phenomenon of individual group identification to 'brush up the traffic'. It proves that people naturally belong to a group, and the public is unlikely to make choices that go against the characteristics of the group. This paper investigates these views using Chinese social media platforms.

Keywords: Recommendation Mechanisms, Social Media Cluster, Group Identity, The Herd Phenomenon.

1. Introduction

With the wave of digital technology sweeping across the globe at an unprecedented pace, social media has deeply integrated into the daily lives of the Chinese people, becoming a crucial channel for information acquisition, entertainment, and social interaction. TikTok, with its creativity and vibrancy in short videos, Weibo, with its broad public opinion platform and immediacy, and WeChat, relying on its powerful social network and multifunctional services, together create a diverse social media ecosystem. According to statistics, Weibo has over 200 million daily active users, and TikTok had over 1 billion users by 2024, with daily active users reaching 908 million during peak times like the Spring Festival. WeChat sees 1.09 billion daily openings and 330 million users engaging in video calls. These apps have become essential tools in the lives of Chinese people. On these social platforms, personalized recommendation mechanisms have become the crucial link connecting users with vast amounts of content. These mechanisms are based not only on complex algorithms that analyze users' browsing history, interests, and behavior patterns but also cleverly incorporate users' individual initiatives.

Individuals are social beings with a natural tendency to belong to groups. Research shows that a sense of belonging not only affects individual psychological health but also influences behavior choices in social settings. On social media, individuals seek validation from their peers and are therefore more likely to support viewpoints that align with their group characteristics. User initiative plays a crucial role in the recommendation mechanisms of social media. During the processes of growth and socialization, individuals internalize the values, beliefs, and behavioral norms of their groups. This internalization process makes individuals more likely to accept and spread group viewpoints while being skeptical of opposing perspectives. In social media interactions, individuals may choose to express opinions that align with their group due to resonance.

User initiative is reflected in actions such as actively choosing to follow specific topics or people, engaging in interactions like liking, commenting, sharing, and actively searching for specific content. These proactive behaviors provide the recommendation system with rich user feedback, allowing the algorithm to continually refine and adjust, thus more accurately capturing and recommending content that aligns with users' personalized needs.

At the same time, users' active exploration and feedback foster the diversity and innovation of social media content, creating a positive cycle: users actively seek and create content, and the platform further enriches and optimizes the recommendation system based on this content, ultimately building a more personalized and interactive social media environment. Therefore, individual initiative is not only a critical driver of the accuracy of recommendation mechanisms but also a key factor in the ongoing prosperity and development of the social media ecosystem. This article mainly explores how individual user initiative affects social media recommendation mechanisms and the role individuals play within these mechanisms.

2. Literature Review

As a ubiquitous social behavior pattern, conformity psychology can be traced back to the field of psychology, where it has been an important topic under discussion since the early stages of this discipline. The normative formation experiment conducted by Sherif in 1936 marked the beginning of research into conformity behavior. Through his meticulously designed autokinetic effect experiment, Sherif delved deeply into the specific manifestations of conformity behavior among individuals and the underlying factors influencing it, in situations where essential information was lacking, and social norms were present. The findings of this experiment not only revealed the complexity of conformity behavior but also underscored the significant role played by external environments and internal norms in shaping individual behavior [1]. Group identity serves as a prerequisite for social connections to influence individual mental health, providing individuals with psychological resources to cope with setbacks, changes, and challenges, thereby strengthening their sense of trust, belonging, security, and support [2]. Individuals tend to have a strong need for group identity and acceptance, which represents a sense of being welcomed and protected. Within the group, they often aspire to be more active and occupy a more significant position. When status becomes sufficiently important relative to intrinsic utility, many individuals conform to a single, homogeneous standard of behavior, despite having different underlying preferences. They are willing to conform to social norms because they recognize that even minor deviations from these norms can significantly harm their status [3]. When an individual deviates from group norms, not only does it create a certain psychological pressure within them, but it also undermines their social status within the group. Individuals are motivated to form accurate perceptions of reality and respond accordingly, to develop and maintain meaningful social relationships, and to uphold a positive self-concept [4].

In daily life, people naturally integrate into various groups, and this integration imparts to everyone a multitude of social identity labels, such as those related to gender, race, ethnicity, and other aspects of identity. These social identities are an integral part of an individual's self-concept, influencing

every aspect of their lives [5]. As social beings, individuals are endowed with multiple identities from birth, and in the realm of social media, a platform that blends the real and virtual, people acquire yet another layer of identity. The development of social media holds immense significance in today's era, as it has not only transformed the way people communicate but also profoundly impacted information dissemination, commercial activities, social interactions, and individual identity construction. Under the influence of group consciousness, group identity has a direct mobilizing effect on individuals' willingness to engage in group behavior. Additionally, it can moderate the relationship between group emotions, group efficacy variables, and individuals' behavioral intentions. Special forms of group identity, such as political identity, shared identity, and dual identity, have varying impacts on the occurrence of collective behavior. From a dynamic perspective, participation in collective behavior reinforces individuals' sense of in-group identity, and a strong group identity, in turn, exerts a sustained influence on the actions of participants [6]. Especially on social media platforms, the phenomena of collective behavior and group identity are often amplified. This field, despite being extensively researched by many scholars, has seen limited studies focusing on the proactive role of individuals within Chinese social media.

3. Methodology

This article uses a survey to analyze individual versus collective behavioral awareness, aiming to explore the differences between the two. The survey was created with Questionnaire Star and distributed on Weibo and TikTok platforms.

The survey is divided into two parts, A and B. For Part A, the design includes screenshots of trending topics on Weibo at the time, which serve as reference options for the following questions. Part B does not include Weibo trending topic screenshots and feature options presented in a randomized order. Using the AB format aims to determine if public choices differ significantly when options with collective features are presented. It allows for a more convenient comparison of how individual choices change with or without group influence. The selected trending topics span different time periods, including those from August 2024 and May 2022. This variation is intended to explore whether the popularity of topics that were highly trending at specific times would result in different responses if presented now. A, and B in two volumes received 153 copies. The question design of the survey is to first set the previous hot search topics as options so that the public can choose the relevant topics that they are interested in now.

4. Results

The findings from the survey in Section A align with the actual circumstances observed in trending topics. Notably, a majority of the data from Section A's results are relatively extreme, with survey respondents tending to select the first few options provided. The choices made by the survey respondents were also predominantly concentrated within the first five options. However, there was a particular instance in Section A where the inclusion of a specific trending topic from a certain time period on April 27th, 2023, led to significant variation in the survey respondents' choices. April 27th, 2023 was the day when the giant panda Ya Ya returned to China. Based on the Weibo trending topics at that time, the response and popularity surrounding this type of topic were relatively high. However, when making a choice in the present context, it is likely that the heat surrounding such topics has diminished.

In Section B of the survey, the results selected by the participants showed significant changes in the absence of trending topic screenshots. The chosen outcomes generally did not align well with the original trending topics, and there was a notable decrease in extreme values. For instance, most of the top trending topics provided were related to entertainment and culture. And the majority of topics

listed towards the end were related to people's livelihoods. From the results of Section B, it can be observed that most of the topics related to people's livelihoods surpassed those related to entertainment and culture, indicating that survey respondents predominantly chose topics that were more relevant to their own lives. For example, when topics such as "Academic Daji" related to academic work, "Elderly Man Using a Kitchen Knife to Peel an Apple on a High-Speed Train," and "Woman Falls into a Coma After Pregnancy" were mentioned.

In Section A, where survey respondents first saw the provided screenshots of trending topics and the selection order was not shuffled, the chosen results generally aligned with the original real-life trending topics. In contrast, Section B did not provide screenshots of trending topics, and the order of the topics was shuffled. As individuals were not influenced by the group, the results from Section B differed significantly from the original Weibo trending topic rankings.

5. Discussion

Through the above questionnaire analysis and the analysis of the results of volume A, the respondents saw the hot search ranking at that time before the selection, and the group identity psychology also played a greater role in the social media platform. Individuals are eager to obtain group identity to be more utilized. Based on the findings from Section A, the phenomenon of individuals actively assimilating is evident. In Section A, not only group identity but also the influence of time span and the weakening of news timeliness contributed to decreased attention. The public is unlikely to choose options that do not conform to the group consciousness, and the human culture and social environment further strengthen the tendency to belong to groups. In Section A, the public had prior knowledge of which topics the respondents were more interested in, which may have led to a psychological effect among the respondents where they felt compelled to conform to the majority, thinking, "If everyone is interested in it, I should check it out too." In this case, the respondents may have generated psychological pressure. In order to keep up with the idea of the group, the public will worry about whether they will be left behind by the group. Such phenomena not only appear on social media platforms but also common social phenomena often appear in daily life. This phenomenon is also used in social media in order to gain traffic. In analyzing Section B, where the actual trending topics were not provided, and respondents were left to select topics based solely on their own interests, the survey results showed significant differences from the original situation. Among them, the first five items in the original hot search order are basically entertainment news, while the last five items are mostly social and livelihood news. In this survey, the popularity of the last five topics mostly surpassed the top five topics at that time. Perhaps in order to gain traffic, in order to exposure, stars will go to their own topics hot search, buy heat, and then use the public conformity phenomenon in social media, and then get more exposure and traffic. This point should be avoided as far as possible so that the topic really needs to get attention to get attention.

People are naturally grouped. Since childhood, we have been influenced and educated by group values through family, school, community, and other channels, and we have learned how to get along, cooperate, and compete with others in the group. These experiences and experiences shape our group identity and belonging, making us more inclined to integrate into groups and follow group norms. To maintain this social identity, individuals will tend to imitate other members of the group to conform to group norms and behavioral patterns. This imitation behavior can not only help individuals gain acceptance and recognition in the group but also reduce the psychological stress caused by the deviation from the group. The phenomenon of public conformity is helpful to social stability to some extent. While most people follow a set of rules, a small number of people who deviate from the rules are also highly likely to adjust their behavior because of psychological group pressure. This phenomenon can also be analyzed from a variety of angles. From the perspective of evolutionary biology: in the process of human evolution, group life provides individuals with the advantage of

survival and reproduction. Through group cooperation, people can jointly resist foreign enemies, share resources, improve hunting efficiency, and better raise their offspring. This advantage of group life is preserved through gene transmission, making humans naturally inclined to seek and maintain group relationships. Psychological needs perspective: As social animals, human beings have a strong need for social identity and a sense of belonging. This need is an important component of individual mental health and helps to build self-esteem, confidence, and security. By integrating into the group, individuals can receive support, recognition, and care from others, thus meeting these psychological needs.

6. Conclusion

The role of individual initiative in Chinese social media is more influenced by the herd phenomenon. Through this survey, the results of Part A and Paper B were compared and analyzed through questionnaires created by Questionnaire Star and released on Weibo and TikTok platforms. The results of Part A showed that the survey respondents were significantly influenced by the ranking of hot searches on social media platforms and the psychology of group identification in their choices, and demonstrated a clear phenomenon of individual active assimilation. In addition, the timeliness of the news is also an important factor influencing the choice, for example, like the return of the giant panda YaYa in Part A, the public is more inclined to choose the option that is in line with the consciousness of the group. This phenomenon is not limited to social media but is also prevalent in social life. In contrast, Part B, in which respondents chose topics based on their own interests without providing the reality of the hot searches, resulted in a significant difference from Part A. The first five items in the original hot search ranking were mostly entertainment news, while the last five items were mostly social and livelihood news. However, in Volume B, the latter five topics have overtaken the first five in terms of heat, reflecting the public's concern for actual social problems. The phenomenon of individual herding is sometimes exploited to gain traffic, and discussions about how celebrities may gain traffic and exposure by hyping up a topic can in some cases sink a topic that really needs the traffic.

From a multidisciplinary perspective, human beings are born with a sense of group belonging and identity; people belong to groups. This psychological need motivates individuals to imitate the behaviour of others in the group in order to conform to group norms. This herd phenomenon is particularly evident in social media, which contributes to social stability and may also be exploited to steer public opinion. Therefore, the phenomenon needs to be examined and analysed from a number of perspectives in order to promote the healthy development of society.

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