

Investigating the Role of User Motivations and Satisfaction on Weibo Continuance Intention

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Abstract

The fast development of the social networking sites (SNS) has paved the way for the development and growth of social media, including Weibo. Scholars have focused on the behavior of social media users. However, they have insufficiently considered the impact of these motivations on the emotional state of individual users. Investigation of the following questions is important to further understand how users' satisfaction forms user continuance use intention: (1) what is the impact of motivations on a user's satisfaction? and (2) how does this satisfaction affect continuance use intention? To navigate this intricate maze, our research synergistically integrates the User and Gratification (U&G) and Expectation Confirmation Theory (ECT), offering a robust theoretical scaffold to delve into the myriad impacts of user motivations on satisfaction and, consequently, on the intention to continue using the platform. Grounded in this conceptual framework, an empirical inquiry was initiated through an online questionnaire targeting Weibo's vibrant user base (n=343). Data was analysed by PLS-SEM. The results show that Weibo users' Cognitive needs (CN), personal integrative needs (PIN), social integrative needs (SIN), escape needs (EN) have a significant positive impact on satisfaction (ST), and ST also has a significant positive impact on continued use intention (CI) has a significant positive impact. The study demonstrates the complex relationship between emotional resonance and technological engagement on platforms such as Weibo. Beyond merely describing user behavior, the study reveals deeper, often underlying emotional currents that influence user loyalty and engagement in the digital realm.

Keywords: SNS, U&G, satisfaction, continued use intention

Introduction

The swift evolution of the Internet and the field of information science has catalyzed the emergence and expansion of digital communication platforms, encompassing social networking sites (SNS) and blogs. Since the inception of the pioneering online social network, there has been a momentous surge in the proliferation of such platforms (Boyd & Ellison, 2010). SNSs can be described as digital services facilitating users to craft personal profiles and

connect with fellow users within the same ecosystem (Boyd & Ellison, 2010). These platforms enable members to disseminate texts, audios, videos, and visuals. Often termed as online communities, SNSs offer virtual spaces where enthusiasts with common interests collaborate to create content, unhindered by geographical or temporal barriers (Jin et al., 2010). As a result, SNSs have revolutionized interpersonal connectivity, offering platforms for self-expression, information dissemination, and virtual socialization. Both individual participants and corporate entities derive multifaceted advantages from these online communities. For instance, businesses can enhance customer surveillance and elevate service quality (Banks et al., 2002). The indispensable contribution of social media to organizational endurance is becoming increasingly evident (Lipsman et al., 2012). A deeper comprehension of the enduring usage intentions of social media can consequently fortify business resilience.

The SNS market is characterized by its volatile and expansive nature, with many platforms providing overlapping functionalities. To navigate this competitive landscape, it's imperative for SNS creators and overseers to continually refine their strategies for user retention (Gan & Li, 2018). While initial user onboarding and engagement are pivotal, sustaining user loyalty over prolonged periods is an equally critical challenge that needs addressing (Bhattacharjee, 2001). The long-term vitality of these online communities is intrinsically linked to users' sustained participation intentions (Jin et al., 2010). Thus, delving deeper into determinants shaping users' enduring engagement is paramount. Historically, various theoretical lenses like self-determination theory, the uses and gratifications (U&G) theory (Jin, 2013), the expectation confirmation theory (ECT) (Bhattacharjee, 2001), the IS success model (DeLone & McLean, 1992), and the social identity theory (Kang et al., 2009) have been employed to explore user engagement dynamics. However, these studies predominantly emphasize the technological facets of user experiences, inadvertently narrowing the breadth of their insights (Benbasat & Barki, 2007). Notably, contemporary research leveraging the U&G theory to gauge enduring user engagement with social media underscores the profound influence of user gratifications on initial and sustained usage intent (Li & Wang, 2017). Yet, there's a noticeable oversight in evaluating how these motivational factors resonate with users' emotional landscapes. Moreover, by zeroing in primarily on technological dimensions of user engagement, these investigations potentially miss out on capturing the holistic user experience (Benbasat & Barki, 2007; Cao et al., 2015). Within the SNS context, users' decisions to persistently engage with a platform hinge not just on its functional appeal but also on the emotional bonds they forge (Gogan et al., 2018). These intertwined facets are central to understanding sustained engagement intentions and platform longevity.

This research endeavors to elucidate: (1) what is the impact of motivations on a user's satisfaction? and (2) how does this satisfaction affect continuance use intention? In pursuit of these objectives, we meld insights from the U&G and ECT frameworks to theorize the interplay between user motivations, satisfaction, and enduring engagement inclinations.

In an era where digital interactions are becoming the norm, understanding the underpinnings of sustained user engagement on SNS isn't merely an academic pursuit; it's a societal and economic imperative. The ability for platforms to retain users over extended periods determines not just their commercial viability but also influences the very fabric of digital society and its future trajectories. For businesses, insights into user motivations and enduring engagement can translate into enhanced user experiences, better customer loyalty, and in turn, a more fortified market position. For users, a platform that aligns well with their motivations and emotional landscape can offer a more fulfilling digital interaction experience. The study of this topic, therefore, carries significant weight, poised to benefit platform

creators seeking optimization strategies, marketers aiming for more profound connections, and end-users looking for enriched online engagements. By focusing on the intricate interplay between user motivations, satisfaction, and continuance intention, this study is not just enriching academic dialogues but also providing actionable insights that can reshape the paradigms of digital communication.

Literature review

Motivation and satisfaction

The U&G theory is primarily centered on deciphering the psychological triggers directing individuals towards specific media interactions (Cheung et al., 2011). Building on this foundation, Katz et al. (1973) segmented 35 needs, originating from discussions on mass media's societal and psychological roles, into five categories: CN, affective needs (AN), personal integrative needs (PIN), social integrative needs (SIN), and escape needs (EN).

Within online studies, motivations differ based on the context. For example, Diddi and LaRose (2006) highlighted surveillance and escapism in online news. Similarly, motivations like social engagement, entertainment, status elevation, and information sourcing are linked with Facebook (Park et al., 2009). Digging deeper into online sharing's psychology, Choi et al. (2013) cited drivers such as relationship reinforcement, seeking social reinforcement, boosting self-worth and respect, knowledge acquisition, and relaxation.

While the naming and tallying of motivations might vary across research, they can majorly be mapped to Katz's categories. In the social media context, we identify CN, PIN, SIN, and EN as particularly pertinent. CN focuses on the inherent drive for information to enhance understanding. PIN concerns the ambition to augment one's esteem, assurance, stability, and social position. SIN aims at nurturing ties with acquaintances, kin, and the worldwide populace. EN, aligned with Katz et al. (1973)'s perspective, pertains to desires for reprieve from daily pressures.

The U&G theory offers a lens into the interplay between user motivations and satisfaction, suggesting users find satisfaction when a medium meets their motivations (Johnson & Yang, 2009). Numerous studies indicate a positive correlation between motivations, satisfaction (Kim et al., 2010), and loyalty (Kim et al., 2011). Individuals tap into social media to address certain needs. A failure of these platforms to fulfill those can wane user engagement. Thus, motivations crucially influence user satisfaction levels on social media platforms. From this, we infer the hypotheses:

- H1. CN positively impacts social media satisfaction.
- H2. PIN positively impacts social media satisfaction.
- H3. SIN positively impacts social media satisfaction.
- H4. EN positively impacts social media satisfaction.

Satisfaction and continued use intention

Continued use intention (CI) denotes a user's inclination to consistently utilize a product or service in the future, grounded in prior experiences and perceived advantages (Limayem & Cheung, 2008). This construct is vital in gauging the triumph of various digital tools and offerings, especially in today's fast-paced digital era where retaining users holds equal weight to gaining them. Within social media, CI reflects not just the intent to remain but also the drive to actively participate, disseminate, and connect (Hsu & Lin, 2008). Such inclinations are typically molded by a mix of intrinsic (like amusement or emotional bonding) and extrinsic (such as social connections or perceived value) factors. Consequently, discerning the

catalysts, particularly satisfaction, that influence CI is crucial for scholars and professionals aiming to boost user loyalty and participation on social media channels.

According to the Expectation Confirmation Theory (ECT), a consumer's contentment emerges from the affirmation obtained when matching their anticipations with the realized outcome. This contentment subsequently forecasts the likelihood of future engagements (Oliver, 1977). Thus, continuous user behaviors align with the pleasure derived from past interactions (Bhattacharjee, 2001). In the digital milieu, Kim et al. (2009) asserted the importance of trust and contentment for sustained involvement in e-commerce. Particularly in areas like information systems (Cheung & Lee, 2010; Lin et al., 2005) and social media (Shi et al., 2010), there's compelling evidence underlining the positive association which indicates that users' content with their interactions are more inclined to persist in their platform use. Given that numerous users are still navigating the terrains of social media and may not be deeply immersed, prior encounters can hold considerable sway over their decisions to persist. This brings us to the hypothesis:

H4. Satisfaction is positively correlated with the continued use intention of social media.

Based on the proposed hypothesis, the conceptual framework of this study was visualized (see Figure 1).

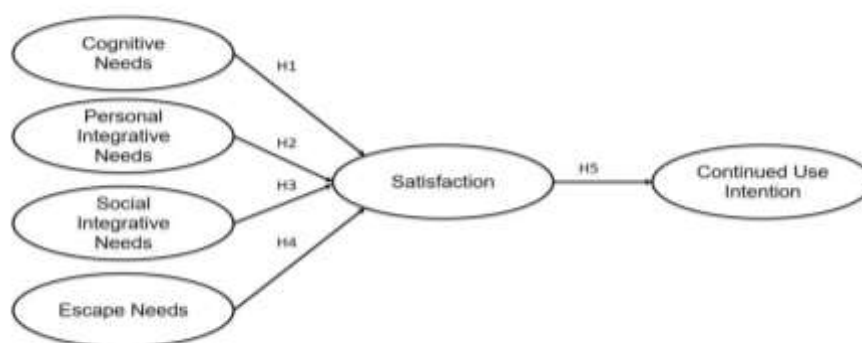


Figure 1 Conceptual framework

Methodology

Sample Collection

The study's framework and associated hypotheses were examined through an online survey. Considering the broad range of potential respondents, a random sampling method was employed. Such a technique was pivotal to capture diverse representations across different age demographics, economic backgrounds, and patterns of Weibo usage. Through online means, a cumulative of 402 survey responses was accumulated. Out of these, 59 were excluded due to noticeable patterns in their responses or failure to meet attention-check criteria designed to weed out non-serious or distracted participants. Post this stringent screening, a total of 343 valid replies were curated for further evaluation. The demographic details of these respondents are summarized in Table 1.

Table 1

Demographic information of the respondents (n = 343)

Measure	Items	Frequency	Percentage
Gender	Male	183	53.4%
	Female	160	46.6%

Education	High school or lower	65	18.9%
	Bachelor	180	52.5%
	Master	75	21.9%
	PhD or higher	23	6.7%
Age	<20	45	13.1%
	20-30	200	58.3%
	30-40	70	20.4%
	>40	28	8.2%
Usage frequency	Less than once a month	30	8.7%
	Several times a month	55	16.0%
	Several times a week	130	37.9%
	Several times a day	128	37.4%
Usage duration (in years)	<1	45	13.1%
	1-2	120	35.0%
	2-3	100	29.2%
	3-4	50	14.6%
	>4	28	8.1%

Measurement Tools

The investigation measured six primary constructs: CN, PIN, SIN, EN, ST, and CI. Measurements for these variables were inspired by earlier studies and were modified to fit the Weibo context. A seven-point Likert scale was employed for all items, with endpoints defined as 1 (strongly disagree) and 7 (strongly agree). To analyze this data, PLS-SEM was the chosen tool.

Before the main survey, a preliminary validation was conducted for our research tool. The initial survey was drafted in English. Given our audience's language preference, it was then translated into Chinese. This translation ensured that the core intent and subtleties of the questions remained unaltered for respondents more fluent in Chinese. Three IS scholars, all experienced with SNS, were tasked with assessing the Chinese version. Their evaluation ensured that the translated form retained the original's conceptual depth, not just its literal meaning. Their input was also sought on the clarity, sequence, wording, and context relevance of the translated tools.

Following their insights, an expanded survey was conducted with 45 Weibo users, validating the final measurement items in an actual user environment. Feedback from this phase bolstered our trust in our tools as the findings verified that our model adhered to the accepted standards for both consistency and authenticity.

Result

In our data assessment, we adopted a two-step approach as recommended by Anderson and Gerbing (1988). The initial step focused on evaluating the measurement model, followed by an examination of the latent variable structural relationships. This phased method aims to ensure the reliability and validity of the measurement scales before diving into the complex relationships within the model. SmartPLS was our tool of choice for the analysis. A notable feature of PLS (Partial Least Squares) is its adaptability. It doesn't tie down researchers with rigid requirements related to measurement scales, sample sizes, or residual distributions, as

pointed out by Chin and Newsted (1999). This offers a more inclusive analysis range, suitable for various datasets and research scenarios.

Validity and Reliability

The adequacy of the measurement model is evaluated based on the criteria of reliability, convergent validity, and discriminant validity. To determine reliability, both the Cronbach's Alpha (CA) and composite reliability (CR) values were utilized, following the guidelines set by Fornell and Larcker (1981). As presented in Table 2, all CA values exceeded the threshold of 0.7, with values ranging from 0.795 to 0.956, aligning with commonly accepted standards. Similarly, all CR values in Table 2 surpassed the benchmark of 0.7, with values between 0.866 to 0.968, which is considered satisfactory. For convergent validity, Fornell and Larcker (1981) recommended that the average variance extracted (AVE) for each construct should surpass the variance attributed to measurement error for that specific construct, implying AVE should exceed 0.50. In accordance with this criterion, Table 2 indicates that all AVE values lie between 0.618 to 0.894, denoting satisfactory validity. To confirm discriminant validity, diagonal elements in a correlation matrix should possess higher values than the off-diagonal elements. The outcomes from our analysis affirm good discriminant validity.

Table 2
Results of validity and reliability

	CA	CR	AVE	CN	PIN	PIN	EN	ST	CI
CN	0.862	0.906	0.707	0.841					
PIN	0.795	0.866	0.618	0.372	0.786				
SIN	0.905	0.925	0.756	0.266	0.417	0.870			
EN	0.946	0.962	0.894	0.342	0.446	0.534	0.946		
ST	0.882	0.919	0.740	0.313	0.469	-0.062	-0.057	0.860	
CI	0.956	0.968	0.884	0.227	0.336	-0.025	0.041	0.598	0.940

Note: CA, Cronbach's Alpha; CR, Composite Reliability; AVE, Average Variance Extracted; CN, cognitive needs; PIN, personal integrative needs; SIN, social integrative needs; EN, escape needs; ST, satisfaction; CI, continued use intention; Discriminant validity was ascertained using the Fornell-Larcker criterion

Hypothesis test

The conduit from CN to ST is robustly validated ($\beta = 0.238$, $p < 0.001$), affirming its significance. The linkage from PIN to ST is strongly corroborated ($\beta = 0.325$, $p < 0.001$), confirming its importance. The relationship from SIN to ST is decisively endorsed ($\beta = 0.264$, $p < 0.001$), establishing its relevance. The vector connecting EN to ST is significantly ratified ($\beta = 0.227$, $p < 0.001$), substantiating its role. Finally, the association between ST and CI is emphatically supported ($\beta = 0.574$, $p < 0.001$), reinforcing its influence. Table 3 shows an overview of hypothesis test, all hypothesis proposed were supported.

Table 3
Results of hypothesis test

Hypothesis	Path coefficient	P value	Remark
H1 CN -> ST	0.238	0.000***	Supported
H2 PIN -> ST	0.325	0.000***	Supported
H3 SIN -> ST	0.264	0.000***	Supported

H4 EN -> ST	0.227	0.000***	Supported
H5 ST -> CI	0.574	0.000***	Supported

Note: * $p < 0.05$; ** $p < 0.01$, *** $p < 0.001$; CN, cognitive needs; PIN, personal integrative needs; SIN, social integrative needs; EN, escape needs; ST, satisfaction; CI, continued use intention

Discussion

The rapid emergence of the Internet and advancements in information science has unequivocally reshaped the social communication and business landscape through the creation and evolution of SNS. As the influence of platforms such as Weibo increases in the global communication fabric, it's imperative to understand the underlying motivations that govern user behavior, engagement, and retention.

At the heart of this digital transformation is the U&G theory. Initially postulated by Katz et al in 1973 to explore the motivations behind mass media consumption, the theory's foundational tenets hold surprising relevance in today's digital age, especially in the context of multifaceted platforms like Weibo. This microblogging site, renowned for its rich blend of social networking and multimedia sharing, offers a kaleidoscope of user experiences, ranging from news consumption to social interaction and beyond.

The diverse nature of Weibo encapsulates a spectrum of motivations delineated by Katz, from cognitive to social integrative needs. However, this exploration isn't isolated to Weibo. The global landscape of SNS, with platforms vying for user attention, underscores a universal principle: while initial adoption is crucial, long-term success depends on sustained user engagement. Thus, understanding the interplay between user motivations, satisfaction, and continued use intention becomes a focal point of study.

In our attempt to bridge the theoretical paradigms of U&G and ECT, we present a holistic framework for SNS user behavior. The U&G theory offers insights into user motivations while the ECT, emphasizing the relationship between satisfaction and engagement, provides a compass for platforms striving for long-term viability. Through a marriage of these theories, we shed light on the pivotal role of emotional engagement, intertwined with the platform's functional value, in predicting user loyalty.

It's evident, as showcased by Weibo's continuous adaptations, that successful platforms need to ensure alignment between their offerings and user motivations. In a competitive market, platforms must cater to both functional and emotional user needs, balancing informational, social, and emotional gratifications. Such a balanced approach, informed by the U&G and ECT paradigms, has the potential to usher in not just user retention but the cultivation of vibrant, engaged communities.

However, our study isn't without limitations. First, while we acknowledge the foundational tenets of motivations postulated by Katz et al., the dynamic nature of digital media suggests that new, platform-specific motivations might emerge. Secondly, cultural variations can influence the generalizability of our findings. The behavior of Weibo users, deeply rooted in the Chinese context, may differ from users of similar platforms in other cultural contexts.

Implications and Future research

For practitioners, our study offers a blueprint for designing features and content that resonate with user motivations, ensuring satisfaction and fostering sustained engagement. Platforms need to be agile, adapting to both technological advancements and evolving user needs.

Academically, this research augments the information systems literature, offering scholars a combined lens of U&G and ECT to explore SNS user behavior. Future research can delve deeper into platform-specific motivations and the cultural nuances influencing user engagement and loyalty.

In conclusion, as the realm of social media continues to evolve, understanding the timeless tenets of motivations and their relationship with user satisfaction and continued engagement remains central. For platforms to succeed in this dynamic environment, a nuanced balance of technological prowess and emotional resonance is paramount.

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