

Internet and Subculture: Research on the Virtual Identity of the Zhihu Knowledge-Sharing Community Postprint

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Abstract

In recent years, with the gradual development of Internet technology, communication media has evolved from the original telegraph to today's online interactive communication, and virtual communities have emerged with 'interest' as a bridge. Based on identity theory, this paper conducts a fundamental analysis of members of the Zhihu virtual community and seeks to identify the influencing factors that affect the construction of virtual community identity. Specifically, through correlation analysis of interaction frequency, education level, and personal economic status, it is found that the identity of the Zhihu virtual community is constrained by these three factors.

Full Text

Internet and Subculture: Research on Virtual Identity in the Zhihu Knowledge-Sharing Community

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Abstract: In recent years, communication media has evolved from the telegraph to today's online interactive technologies, giving rise to virtual communities built around shared interests. Grounded in identity theory, this paper analyzes members of the Zhihu virtual community to identify factors influencing the construction of virtual community identity. Specifically, through correlation analysis of interaction frequency, education level, and personal economic status, the study finds that identity in the Zhihu virtual community is constrained by these three factors.

Keywords: Zhihu community, identity, subculture

1.1 Background Introduction

In recent years, with the accelerated popularization and stratification of the Internet in China, virtual communities linked by shared interests have played an increasingly important role in users' lives. In this context, I have observed that whether in fan communities on WeChat or knowledge-sharing communities such as Zhihu and Hupu, internal members possess unique discourse systems and communication methods. People often present a more unified mode of expression and interaction when facing social hot events. This raises several questions: How does the virtual community affect members' sense of self-identity? Will exclusive communication methods help establish member identity? This study investigates Zhihu users through questionnaire surveys. The reason for using questionnaires is that potential users are difficult to reach for direct interviews to obtain effective data. Random distribution of questionnaires online not only saves survey time but also covers a broad range of user groups.

2.1.1 Foreign Research

The gradual popularization of virtual communities has attracted widespread attention from international scholars. French sociologists Bruno Latour, Michel Callon, and John Law summarized the phenomenon from a sociological perspective and proposed Actor-Network Theory, which advocates following the actors to demonstrate the actor-centered network construction process among various heterogeneous actors. In 2019, He Dejun's study on virtual community identity from the perspective of "actor-network theory" noted that American sociologist Fischer proposed the theory of "community liberation." In his book *Social Networks and Places: Social Relations in the Urban Environment*, Fischer highlighted the role of social networks in urban residents' lives, pointing out that residents living in non-adjacent areas form groups through specific relationships (such as common interests, hobbies, or values), thereby creating their own social networks. In 2000, Howard Rheingold pointed out in *The Virtual Community: Homesteading on the Electronic Frontier* that virtual communities are social groups generated by Internet users through interaction—groups of people engaged in public discussion on the Internet who, over time, form interpersonal networks. Research by several foreign scholars between 2008 and 2010 found that in Internet virtual communities, users typically express their views or participate in discussions on related issues through platforms like microblogs. User participation behavior is mainly reflected in reading, posting, and replying to posts.

Research on topic propagation in virtual community networks mainly includes analysis of virtual community network topology and construction of topic propagation models. This type of research has received significant attention both domestically and internationally and has achieved certain results.

2.1.2 Domestic Research

Domestic scholars have also conducted corresponding research on special groups in virtual communities. From the perspective of sociological structure and function, for example, Zhang Wen pointed out in the 2006 study “Research on Interest-Related Groups in the Change of Urban Social Structure—The Perspective of Daily Life” that the emergence of Huangmei Opera fan groups should be discussed against the background of changing urban social structures. Scholars note that interpersonal communication based on shared interests can provide people with instrumental and emotional support, thereby promoting group identity and giving birth to new relational communities. Sociologist Zheng Hangsheng also defined the network virtual community in his 1996 work *Chinese Society in Transition and the Transformation of Chinese Society* as a community with cultural identity formed by frequent social interaction among Internet users in electronic cyberspace. However, although these studies have conducted relevant research from sociological and psychological perspectives, they have neglected the subculture research perspective.

2.2.1 Foreign Research

In Michael Blake’s 1990 work *Subculture and Juvenile Delinquency*, it was pointed out that the concept of “subculture” was first proposed by American sociologist Talcott Parsons in his analysis of American middle-class youth culture. Subsequently, anthropologist Ralph Linton proposed that young people created a distinctive cultural form divorced from adult society, which further opened perspectives for subcultural studies. Building on subculture, American youth activists in the 1960s creatively proposed “counterculture.” German historian J.G. von Herder pointed out in *On World History: An Anthology* (1997) that nation-states based on cultural identity can survive throughout long histories.

2.2.2 Domestic Research

Domestic scholar Hu Jiangfeng also pointed out that subculture and counterculture are not completely distinct. In critical practice, subculture and counterculture are often used interchangeably. In 2011, scholar Ma Zhonghong noted that youth subculture is changeable, youthful, and challenging—different from the adult culture of social subjects. Chen Shilian’s 2006 work “Cultural Identity, Cultural Harmony, and Social Harmony” pointed out that cultural identity refers to the social psychological process in which individuals internalize and generate a sense of belonging to their own culture and cultural groups, thereby obtaining, maintaining, and innovating their own culture. Cultural identity includes social value standard identity, religious belief identity, customs identity, language identity, artistic identity, and so on. Cultural identity is the process of forming the “self.” As Montaigne said: “The most important thing in the world is to know yourself.” In 2001, Guo Shuyong pointed out that identity was originally a concept from philosophy, sociology, psychology, and other disciplines,

referring to the self-identity and personality of a social actor—the characteristic that distinguishes one social actor from another.

2.3 Questions Raised

However, these studies have not examined the phenomenon of cultural identity in virtual communities from the perspective of subculture, nor have they addressed how subculture constructs identity. Therefore, from the subculture perspective, this paper analyzes the following questions: How does virtual community affect members' sense of self-identity? Will exclusive communication methods help establish member identity?

3.1 Hypothesis Establishment

Based on the above questions, this study investigates factors influencing identity establishment and proposes the following hypotheses:

H1: The higher the frequency of interaction between members of the virtual community, the higher the members' community identity.

H2: The higher the education level of members, the lower their community identity.

H3: The higher the economic status of members, the lower their community identity.

3.2 Sampling Method

A total of 201 valid questionnaires were collected in this survey. The sample distribution shows that most respondents were over 18 years old, more than 80% held a bachelor's degree or above, and most had disposable incomes exceeding 5,000 yuan. This questionnaire uses a five-level Likert scale to measure virtual community identity in Zhihu. Therefore, in data analysis, relevant items in the scale are summed and averaged to generate a new variable "virtual community identity" for subsequent analysis. The independent variable "interaction degree" includes three dimensions: the frequency of users' likes, comments, and posts on Zhihu. These three variables are measured using a five-level Likert scale.

4.1 Zhihu Community User Characteristics

Zhihu community users are characterized by youth, high education levels, and stable incomes. The survey collected 201 valid questionnaires, with more than 80% of respondents holding a bachelor's degree or above and having disposable incomes exceeding 5,000 yuan. The questionnaire employs a five-level Likert scale to measure Zhihu virtual community identity. In data analysis, relevant scale items are summed and averaged to create a new variable "virtual community identity" for further analysis. The independent variable "interaction

degree” comprises three dimensions: the frequency of users’ likes, comments, and posts on Zhihu, all measured using a five-level Likert scale.

4.2 Correlation Analysis Results

Pearson correlation analysis reveals that Zhihu users’ interaction frequency is significantly positively correlated with their sense of community identity. Specifically, the frequency of likes is significantly positively correlated with community identity ($r = 0.508$, $P < 0.01$), comment frequency is significantly positively correlated with community identity ($r = 0.478$, $P < 0.01$), and posting frequency is significantly positively correlated with community identity ($r = 0.494$, $P < 0.01$). Research hypothesis H1 is supported.

There is a significant positive correlation between users’ personal education level and their identity with the Zhihu community ($r = 0.276$, $P < 0.01$), indicating that higher individual education levels correspond to stronger identification with the Zhihu community. Research hypothesis H2 is not supported. However, there is also a significant positive correlation between users’ personal economic status and their identity with the virtual community ($r = 0.205$, $P < 0.01$), which contradicts the expected direction. Research hypothesis H3 is not supported.

4.2.1 The Higher the Interaction Frequency Between Virtual Community Members, the Higher the Member Identity

To investigate whether interaction frequency between virtual community members affects community identity, this study divides interaction frequency into three levels: like frequency, comment frequency, and posting frequency. Compliance with community norms serves as the identity measurement standard and dependent variable. Pearson correlation analysis was performed on the two groups of data to test their correlation.

This study conducted Pearson correlation coefficient analysis on 200 valid data points. Statistical results show that the correlation coefficient between like frequency and community identity is 0.508 with a significance level of $P < 0.01$. The correlation coefficient between comment frequency and community identity is 0.478 with a significance level of $P < 0.01$. The correlation coefficient between posting frequency and community identity is 0.494 with a significance level of $P < 0.01$, reaching significant correlation at the 0.01 level.

These findings demonstrate that interaction frequency among virtual community members has the capacity to shape identity. Hypothesis 1 is verified, as user interaction frequency is significantly positively correlated with their sense of community identity.

The most prominent feature of the Zhihu community is its interactivity. The essence of interactivity is that communication feedback between senders and recipients gradually increases with deepening communication, yet it differs from ordinary real-world interaction. In virtual communities, everyone has the right

to receive and publish information—the roles of communicator and recipient can be freely interchanged. Consequently, many people exchange views, share feelings, and even propose resistant interpretations of posts in the Zhihu community. Internet technology has transformed people’s concepts of time and space, gradually evolving communication from face-to-face community interaction to network-based virtual community interaction.

Simultaneously, virtual communities do not require people to provide real information. Individuals can adopt new identities to join communities of interest to express their views, thereby completing the construction of self-identity through this interaction.

The establishment of the Zhihu virtual community not only narrows the distance between strangers but also satisfies people’s inherent social needs. With accelerated urbanization, people are increasingly immersed in fast-paced lifestyles. Urban communities contain diverse groups, and communication among them becomes increasingly scarce due to various differences. For example, encounters with neighbors involve only greetings, and interactions between colleagues at work are merely simple exchanges. Over time, people’s spiritual lives become empty and lonely. The virtual community created by Zhihu can gather people with common topics, where each user can post, like, and comment. This enables community members to experience spiritual satisfaction unavailable in the real world and retrieve a sense of belonging, gradually internalizing themselves as members of a “family.”

4.2.2 The Higher the Education Level of Members, the Lower the Community Identity

There is a correlation between the education level of virtual community members and community identity. This survey found that the proportion of respondents with bachelor’s degrees or above exceeded 80%, closely related to the country’s strong support for higher education. Therefore, education level is used as an independent variable and identity as a dependent variable for Pearson correlation analysis to test their relationship.

Data analysis yields the following results: the correlation coefficient between education level and identity is 0.276 with a significance level of $P < 0.01$, indicating a significant positive correlation between the two. This shows that the education level of virtual community members can affect identity construction. Hypothesis 2 is not verified; instead, there is a significant positive correlation between user education level and their sense of community identity.

This also indicates that in today’s information age, while people’s education levels are gradually improving, their spiritual needs cannot be fully satisfied. According to Maslow’s hierarchy of needs, human needs are divided into five categories: physiological needs, safety needs, social needs, esteem needs, and self-actualization needs. The first two represent basic human needs that have been largely satisfied with social development and technological progress. With

accelerated life pace, people's free time becomes increasingly scarce, particularly for intellectual groups who struggle to find like-minded individuals in real society, feeling as though they are on isolated "islands." Consequently, most people devote themselves to virtual communities, which contain numerous intellectual talents where they can share recent gains, exchange experiences, appreciate and respect each other, and continuously improve themselves. This precisely satisfies the latter three spiritual needs (social needs, esteem needs, and self-actualization needs), thereby building and stabilizing community group identity.

Simultaneously, I also found that today's college students are an important factor leading to this result. Most college students use Zhihu for entertainment purposes, finding content that interests them and satisfies their psychological needs for engagement. Meanwhile, those with lower education levels generally know little about the Zhihu app or have never heard of it, which also contributes to decreasing point-to-point communication between people.

With the country's vigorous development of higher education, the knowledge level of social groups will gradually increase, and demand for virtual communities will also grow. Therefore, while vigorously developing material life, future efforts should also attend to satisfying human spiritual life.

4.2.3 The Higher the Economic Status of Members, the Lower the Community Identity

The economic status of Zhihu virtual community members is related to community identity. This survey found that most respondents' disposable income exceeded 5,000 yuan, demonstrating that people's material living standards have significantly improved. Therefore, economic status (disposable income) is used as an independent variable and community identity as a dependent variable for Pearson correlation analysis to examine their relationship.

Combined with the above analysis, the correlation coefficient between user economic status and identity is 0.205 with a significance level of $P < 0.01$, indicating a significant positive correlation between the two. Therefore, the economic status of virtual community users affects individual identity. Hypothesis 3 is not verified; user personal economic status shows a significant positive correlation with their sense of identity in the virtual community.

Economic status determines individuals' material living standards. In today's society, where material desires run rampant and everyone works hard for their own interests, the spiritual world has become extremely scarce. The sharing virtual community built by Zhihu creates a platform for sharing information and receiving desired information. This two-way "encoding-decoding" process narrows the distance between individuals in a virtual space. Economic status affects the social environment and cultural codes that individuals can access, enabling them to resonate with most views in the community and facilitating integration into the virtual community. The virtual community offers them the possibility of a brief "escape," freeing them from social pressure to speak freely.

5 Conclusion

In summary, this study employs questionnaire surveys to investigate the identity of Zhihu virtual community members when facing social events, examining the unified discourse and interactive identity. The research finds that interaction frequency, education level, and economic status are all significantly positively correlated with identity. Hypothesis 1 is supported, while hypotheses 2 and 3 are not supported. This study discovers that Internet technology's integration of temporal and spatial structures has created a virtual space with multi-temporal coexistence. Interaction among community members has expanded from initially "I"-centered social networks to interaction between "we" and "we" across different virtual communities—a process always permeated with the thinking and construction of anthropological self-identity.

However, this study also finds that people's over-reliance on virtual communities and neglect of face-to-face communication in real life may render society indifferent. Moreover, because virtual communities cannot verify members' true identities, a series of vulgar and kitsch community cultures have emerged. Future research should therefore also attend to the adverse effects of virtual communities on social relations to expand relevant research.

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