

## Research on the Impact Mechanism of the Use of Emoticons on Community Identity in Virtual Brand Communities

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### Introduction

China Internet Network Information Center released the 52nd Statistical Report on the Development of Internet in China in Beijing in September 2023: By the first half of 2023, the number of Internet users in China had reached 1.079 billion, and the Internet penetration rate had reached 76.4%, higher than the global average. In online virtual communication on the Internet, simple text communication has obvious limitations, and it is difficult to fully show the changes of both parties' emotions. Emoticons have become an interesting supplement. Despite the advancement of technology, online virtual socializing can interact in real time, but it has never fully achieved the familiarity of face-to-face communication. It is in this context that emoticons play an important role, filling the gap in non-verbal symbols in online communication. By simulating human expressions and body language, emoticons add more emotional color and expression levels to online communication, enrich what could have been pale and boring text communication, and inject new vitality into online communication. With the continuous development of emoticons, they not only fill the gap in online communication, but also gradually increase users' attention to visual communication through images. At the same time, the forms of emoticons also show a trend of diversification. Research on the use of emojis in virtual brand communities will help further tap the interactive value of community members, encourage users to create more high-quality content, promote positive interaction within the community, and thus enhance individual identity and stickiness to the group. By maintaining and enhancing the activity of the community, further stimulate content consumption and inject vitality into the prosperity of the community.

### Methodologies

#### 1) Literature research method

By collecting relevant research results at home and abroad, reviewing articles on the use of emoticons, brand community identity, emotional resonance, interpersonal intimacy, and community atmosphere, and understanding the current research status of relevant theories at home and abroad, a solid foundation is provided for theoretical analysis and empirical research.

#### 2) Participatory observation method

By participating in the brand community as a member, pay attention to community dynamics and interactive phenomena such as emoticon communication among members, and understand the interactive behaviors and processes involved.

#### 3) Questionnaire survey method

Based on the theoretical model of the impact of emoji usage on community identity, mature scales from both domestic and international sources were used for each variable. A reasonable questionnaire was designed and distributed to users in the virtual brand community to obtain their feedback and opinions.

#### 4) Empirical analysis method

This article analyzes the data using SPSS 27.0 and AMOS 21.0 software to verify the reliability and validity of the questionnaire. Finally, correlation analysis and variance analysis are conducted on the data collected from the questionnaire to validate the effectiveness of the model and enrich the relevant theories of emoticons and virtual brand community identity in China.

## Tables

Table 1. Component matrix and confirmatory factor analysis results after rotation

Research variables	Measurement items	Standardized factor load	Factor					AVE	CR
			1	2	3	4	5		
The use of Emoticons	SY3	0.568	0.756						
	SY4	0.519	0.759						
	SY6	0.694	0.653						
Emotional resonance	QG1	0.722		0.776					
	QG4	0.594		0.564					
	QG6	0.596		0.694					
Interpersonal intimacy	RJ3	0.606			0.699				
	RJ5	0.540			0.580				
	RJ6	0.454			0.557				
Brand identification	PR1	0.544				0.784			
	PR2	0.504				0.617			
	PR3	0.749				0.677			
group identification	QR1	0.616					0.609	0.66 7	0.8 34
	QR2	0.533					0.684		
	QR4	0.688					0.752		
	QR6	0.731					0.762		

Table 2. Hypothesis test results

Hypothesis	Path	Estimate	S.E.	C.R.	P
H1	The use of emoticons → community identification	0.447	0.055	4.143	***
H1a	The use of emoticons → brand recognition	0.235	0.089	2.644	***
H1b	The use of emoticons → group identification	0.495	0.105	4.705	***
H2	The use of emoticons → emotional resonance	0.391	0.082	4.764	***
H3	The use of emoticons → interpersonal intimacy	0.312	0.075	4.127	***
H4	Emotional resonance → community identification	0.114	0.041	1.323	***
H4a	Emotional resonance → brand identification	0.152	0.069	2.582	***
H4b	Emotional resonance → group identification	0.103	0.080	1.111	***
H5	Interpersonal intimacy → community identity	0.281	0.067	3.445	***
H5a	Interpersonal intimacy → brand recognition	0.234	0.094	2.036	***
H5b	Interpersonal intimacy → group identification	0.133	0.110	1.602	***

## Conclusion

This article used an online questionnaire survey to obtain 428 data, and based on literature research, constructed a structural equation model to analyze and study the impact of the use of emoticons on community identity in virtual brand communities. Community identity is divided into two dimensions: brand identity and group identity. Emotional resonance and interpersonal intimacy are introduced as mediating variables, and community atmosphere is used as a moderating variable to propose research hypotheses. SPSS 27.0 and AMOS 21.0 are used to test, and the following four conclusions are finally obtained.

Firstly, the use of emoticons in virtual brand communities has a positive impact on community identity. In the era of mobile Internet, the form of virtual brand community forum community has changed into instant group chat. This study seeks to keep pace with the times, focus on the virtual brand community with group chat as the main form, and explore the impact of the use of emoticons on user participation and identity construction of virtual brand community. Each social circle will create their own unique emoticons. The meaning of these emoticons is based on a common agreement among members of the social circle, and is a symbol that can combine reference and symbolic meaning. These rules are communication passwords that are commonly followed by members within the social circle, and only members within the circle can understand their meaning. These emoticons have the function of identifying collective identity and consolidating collective emotions, and can play a cohesive role among members within the circle.

Secondly, the use of emoticons can affect emotional resonance among community members and enhance interpersonal intimacy. Emojis are regarded as a form of behavioral language used in entertainment activities, achieving controllable communication through the adjustment, exaggeration, and disguise of real expressions. With the popularity of emojis, as a standardized emotional symbol, they provide people with a simple and intuitive way to express emotions, allowing both parties to obtain information according to their own needs, making it easier to achieve emotional resonance. In social interaction, emotional resonance is often based on the recognition and perception of each other's emotions. When the sender selects emojis that represent their emotions, the receiver understands and identifies with this emotion based on a shared emotional experience, and forms emotional interactions through responses, promoting a sense of closeness among community members.

Thirdly, emotional resonance and interpersonal intimacy play a mediating role in the impact of the use of emoticons on community identity. Users use emoticons to communicate with other community members in virtual brand communities, and their interests lead to emotional resonance and increased intimacy within the community. As personal feelings deepen, community members gradually form a sense of identification with the community's group and brand. The users of emoticons constitute a dispersed and unstructured free group, and their use of emoticons on social media is mainly based on personal preferences. The interactive behavior between these users occurs in a resonant virtual space, surpassing the limitations of traditional interpersonal communication on time and space, and no longer subject to any constraints. In this interaction, communication between users is based on a shared identity and value choices, rather than coercion or institutionalization. Through cultural identity, they gradually tend towards consistency. In the interactive process, the emoticons selected by different users jointly construct a symbiotic semantic space. The personalized use of emoticons enables users to express emotions and potential meanings more accurately. As a part of a group, similar emoticon usage habits and ideographic systems help to bring members closer together and give users a sense of organizational belonging. This sense of organization is actually a manifestation of identity and group recognition, accompanied by identification with a certain culture.

Fourthly, the community atmosphere provides a positive moderating effect on the model. The introduction of the concept of community atmosphere in this article is inspired by reality. Community atmosphere can affect users' sense of identification with virtual brand communities. Two situations can be imagined: firstly, the atmosphere of the community is very poor, and when there is no supervision, guidance, or response, users' sense of identification with the virtual brand community will not be high; the second scenario is that the atmosphere of the community is very good, even if the community members are unfamiliar and not closely connected, users' sense of identification with the virtual brand community will not be too bad. The premise of this situation mainly depends on the community atmosphere created by virtual brand communities, which can have a positive regulatory effect on community identity.