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Research on User Experience and Brand Attitudes of Chatbots

Shu-Yin Yu

***Abstract*—**With the advancement of artificial intelligence technology, most companies are aware of the profound potential of artificial intelligence in commercial marketing. Man-machine dialogue has become the latest trend in marketing customer service. However, chatbots are often considered to be lack of intelligent or unfriendly conversion, which instead reduces the communication effect of chatbots. To ensure that chatbots represent the brand image and provide a good user experience, companies and users attach great importance. In this study, customer service chatbot was used as the research sample. The research variables are based on the theory of artificial intelligence emotions, integrating the technology acceptance model and innovation diffusion theory, and the three aspects of pleasure, arousal, and dominance of the human-machine PAD (Pleasure, Arousal and Dominance) dimension. The results show that most of the participants have a higher acceptance of innovative technologies and are high pleasure and arousal in the user experience. Participants still have traditional gender (female) service stereotypes about customer service chatbots. Users who have high trust in using chatbots can easily enhance brand acceptance and easily accept brand messages, extend the trust of chatbots to trust in the brand, and develop a positive attitude towards the brand.

***Keywords*—**Brand attitude, chatbot, emotional interaction, user experience.

I. Introduction

CHATBOTS use natural language to simulate human conversations and are widely used in the fields of information services, education, companionship, and therapy. Nowadays, mobile devices are popular, and many application technologies for customer service have been developed. Artificial intelligence (AI) learning enables chatbots to accurately identify users' problems and intentions, enabling AI to have a dominant function in customer service [1]. Chatbots utilize simple-to-operate social platforms and interface design applications to meet the preferences and trends of young people. Customer service chatbots (abbreviated as CS chatbot) can actively promote products or services. The technical management and marketing services of CS chatbot can be supported by multiple people within the company. At the same time, more and more platforms support AI chatbots. CS chatbots meet consumers' needs for intuitive, active, fast, and simplified shopping actions. Enterprises can easily master the chatbot technology, provide an immersive experience, and make the dialogue more human-like and familiar, simulate human conversations. The interface forms are diversified and mature and become an important business communication trend.

CS chatbot is currently the biggest business opportunity for commercial chatbot applications. AI makes the CS chatbot a sense of trust in communicating with real people and can build a bridge of trust with customers. It not only relies on the design and content of human-computer interaction, but also establishes a soft relationship between users and enterprises through emotional dialogue. Therefore, this research needs to understand whether the chatbot design affects the user's emotional cognition and trust, and whether it can establish a good image for the product or service and create a positive attitude towards the brand. CS chatbot provides users with online services or consultations, replacing real-person customer services and providing instant responses. This research aims to understand the differences in users' emotional interaction, trust and attitude towards chatbots. The purpose of this research is as follows:

1) Will users' acceptance of innovative technologies affect the emotional dimension and trust of chatbots?
2) Will the user's emotional dimension of chatbots affect user trust?
3) Does the user's emotional dimension and trust in the chatbot affect the brand's attitude, including cognition, emotion, and behavior?

II. Literature Review

Many research focuses on the interaction between users and chatbots, which are often compared by interpersonal communication. AI chatbots have the advantages of ease of use and convenience, and the design and content of chatbot still have great limitations and unknowns. The early use of chatbots was based on a curiosity mentality, which could not accurately reflect the user's experience or emotions, and thus formed a positive attitude towards the company or brand [2]. Although users utilize chatbots to solve problems, how to actively communicate and invest in emotions, and to establish a trust relationship between humans and machines is an important research goal.

A. Interactive Effects and Applications of Chatbots

The interaction of chatbots simulates real human conversations, which is very similar to interpersonal communication [3]. However, users' motivations for using chatbots are more complex. Factors such as entertainment, sociality, and curiosity make the behavior of chatbots even more difficult to predict [4]. We do not know much about the communication process of chatbots. Therefore, this study investigates users' emotions, trust, and brand attitudes. When

S. Y. Yu is with the Ming Chuan University, Taoyuan, Taiwan (phone: 886989773602; e-mail: syiyu@ boulder.nist.govmail.mcu.edu.tw).

users have positive emotions for chatbots, they can increase the willingness to use, and it is also relatively easy to accept, trust messages and extend the possibility of reuse in the future.

B. Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT)

Research on consumer acceptance of new technologies is mostly based on the Technology Acceptance Model (TAM). However, with the development of digital technology and network systems, most users are already quite familiar with new media and have long accepted them as part of our lives. Research on the application of artificial intelligence has shown that only using the technology acceptance model cannot fully explain the impact of users' acceptance of chatbots [28]. The addition of innovation diffusion theory can increase the level of interpretation. Therefore, this research combines the TAM with the innovation diffusion theory (IDT), called the Technology Innovation Model (TIM), to enhance the explanatory power of the impact on users.

C. The Emotional Interaction and Trust Relationship of Chatbots

The trust of chatbots is based on the trustworthy clues provided by the company. Chatbots must establish closeness and professionalism with users [5], understand user needs and preferences, and maintain interaction to establish long-term trust relationships [6]. Reference [3] found that users regard chatbots as humanized devices. When they "talk" with chatbots, users still maintain social habits with humans (for example, greetings or titles). Users have interpersonal interaction emotions towards chatbots, and thus interpersonal trust issues will also arise. The importance of trust will be affected by salespersons and technological devices [7]. From the perspective of chatbot services, the key to images is not only based on AI, but also covers the entire technology service system. Therefore, the TAM is only for technology operations, which is not enough to explain the user's willingness to use chatbots. In addition to the effectiveness of customer service, dialogue context, and professionalism, the trust in this research also includes information accuracy, privacy security, debugging and reconfirmation, efficiency, and recommendation credibility.

D. The Impact of Chatbots on Brand Attitudes

Brand attitude includes three dimensions: cognition, emotion, and behavior. Cognition is the consumer's evaluation of brand quality. It is the sum of consumers' brand knowledge, belief, and impressions, and is also the conscious part of brand attitude; emotions are the emotions and feelings of the brand, not based on objective facts emotional perception; behavioral intention is the state of preparedness for consumer behavior, and the action of avoiding response to the brand. Today, mobile marketing mainly uses self-media as a medium, focusing on consumer acceptance and attitudes [8]. Marketers look for factors that affect consumers' acceptance of the brand and obtain ways to improve marketing effects. When chatbot technology matures, it will become an important marketing tool. Commodity information and user experience are extremely important key factors for brand attitudes. When users have a positive experience, they will have a considerable sense of trust in the information provided by the chatbot, and it will be easier to accept their recommended brands. In other words, when users accept messages or recommendations from chatbots, they have a good perception of brand quality or brand impression tendencies. Once there are consumer intentions or demands, the purchase behavior is easily persuaded.

The establishment and effect of the emotional relationship between robots and humans is a black box that cannot be grasped at present. Chatbots provide users with diverse media functions and features. How designers shape the personality of chatbots, enhance user intimacy and trust, and then effectively complete tasks is an important development work at present. It is easy for people to personify technological devices, give them individuality, and have social and trusting relationships. When people interact with chatbots, their feelings and behaviors are also differentiated. Visual appearance is the first clue of personality perception. Users will perceive the differences in the personality of chatbots due to the avatar design, and extroverted chatbots will have a higher sense of trust. User emotional input relies on the resonance of the interactive context, dialogue emotion, and tone atmosphere. This research uses chatbot clues to test the relationship between the user's PAD emotional dimension and trust, and the influence on brand attitude.

III. Research Design

A. TAM and IDT

Early research used the TAM perspective to explore the timing, factors, and attitudes that influence people to adopt new technologies [9]. Technology acceptance mode refers to the degree of individual willingness to accept new technology, which depends on the individual's perceived usefulness and perceived ease of use of the technology. When the new technology makes users feel useful or easy to use, the more users tend to adopt it. At the same time, related research pointed out that the explanatory power of the TAM for the willingness to adopt is not complete, and other important factors will also affect the willingness to adopt [10]. Therefore, it is recommended to integrate the variables of the IDT, which is more complete [11].

IDT was put forward by Rogers in 1962. Innovation Diffusion is the process of transmitting an innovative thing, which is shared by all participants in the process of transmitting new things to social systems or communication channels. Cognition and consensus. Reference [12] proposed to use the theory of innovation diffusion to explain the speed at which innovation is adopted, which depends on the characteristics of innovation, which are relative advantage, compatibility, complexity, and trialability. When personal perception innovation has higher relative advantages, compatibility, trial, observation, and low complexity, the willingness to adopt it will be higher. In summary, based on the five characteristics of the innovation diffusion model [12], this study integrates the ease of use and usefulness of the TAM to replace the

complexity (negative) of the innovation diffusion model. Therefore, combining the IDT with the variables of the acceptance model of science and technology, five items including safety, relative advantage, compatibility, ease of use, and usefulness are used as the influence variables of the use and effect of chatbots.

B. PAD Emotional Dimensions

This research uses the PAD emotional dimension to detect the user's emotional experience of the chatbot. PAD is consumers' experience of emotional communication in the process of communicating with information [13], including pleasure is the pleasant feeling of chat robot dialogue; arousal is the degree of excitement or stimulation in interactive dialogue; dominant is the master control and initiative taken by the user in the communication process. The emotional dimension of PAD has significant relevance to the use of mobile devices, the emotions of the consumption process, and social enjoyment [14]. Research on cognition and emotion of chatbots shows that the emotion of using robots affects brand attitudes and presents a positive correlation [14]. The user's identification and feelings with the chatbot will greatly affect the effectiveness of interaction with the chatbot, and affect product cognition, emotion, and willingness to act. Based on the above arguments, the research assumes that the user's sense of PAD towards chatbots have a significant positive relationship with the attitude of the company or brand. When a user has a pleasant conversation process with a chatbot, the user has a sense of excitement or a sense of dominance in the conversation process, forming a good response to the chatbot, and a positive attitude towards the brand or company.

C. Trust and Brand Attitude

Trust refers to conscious interaction and it is also an important factor in maintaining a good relationship [15]. Trust is also regarded as an attitude, intention, or behavior [16], [17]. Trust is a mental state based on positive expectations of other people's intentions or behaviors. It is also the main reason for establishing a sense of belonging in interpersonal, organizational, and social relationships [18]. According to the research of artificial intelligence [16], users' suggestions to AI decision assistants are affected by trust. Reference [19] believes that trust is a crucial factor for people and automated devices. The demand, ease of use, security and reputation of new technologies will affect the trust of users [20], [21]. The chatbot simulates the communication form of real people, and it is easy to achieve interactive trust with users. The user's previous trust in the brand may also affect the trust in the chatbot. The user's trust in CS chatbots mainly depends on effective services. The company or brand represented by the chatbot may generate positive trust, or it may have a negative impact. Privacy and information security will affect users' trust in chatbots [22]. In summary, the trust of chatbots comes from a wide range of factors, including visual design, sincerity of dialogue, provision of professional knowledge, interface design and information security, brand reputation and ease of use of devices, etc. The design, content and security are all related to trust.

D. Personality Characteristics of Chatbots

The Theory of Personality Trait originated in the 1940s [23]. Traits are the basic characteristics that determine individual behavior and are an effective component of personality. When human beings are stimulated by the environment, they produce specific reactions and form different individual performance traits, which are called Personality traits. The behavior pattern produced by the interaction between the individual's personality and the environment forms the individual's lasting and stable physical and mental characteristics, which are unified and persistent. Good customer service staff can measure the interests of individuals, companies, and customers. The most important personality traits of marketing and customer service staff are optimism, flexibility, stress resistance, strong psychological toughness, and good at listening and communicating. Based on the analysis of personality traits, this study selected three items, namely Extroversion, Agreeableness, and Conscientiousness, corresponding to the apparent personality of customer service, as the personality-like research variables of chatbots.

IV. Research Design

A. Sample Design

This study uses e-commerce chatbots as the research sample and selects the B2C business model, and the Union Bank is selected as the test brand to perform tasks such as product information, latest activity consultation and account opening services. Customer service has always been the key to the success of e-commerce. The predecessor of this research is to develop a task-oriented of Line Chatbot. Its functions include customer service consultation, product introduction, response to user-specific questions and commands, etc., and can proactively raise questions and feedback, product suggestions, preferential activities, service consultation, release specific seasonal activities and other functions to increase the frequency and willingness of chatbot use.

The test sample includes button-type interface: it saves users' time and reduces the burden of thinking. This is a common form of reply, and most users expect the interface form. The current design is 6 options, presented in the form of carousel with graphics and text. Text: allow users to flexibly ask questions, escape from too restrictive graphic design, but will be limited by the identifiability and complexity of the problem. Process design: design the conditions generated by the wrong situation and maintain the flexibility of the user's decision-making in the dialogue process. When an error situation occurs, the user's reply can be saved to feed back further options or messages. Terminology: the text communication of the dialogue chatbot has fewer personal characteristics than the voice dialogue. Overly complex descriptions will be difficult to understand, and users and robots will tend to use direct words.

B. Questionnaires and Scales

The survey of participants' acceptance of innovation and technology is based on the scale constructed by [23] to measure

the acceptance of technology [24] and the theory of innovation diffusion. Ease of use and perceived usefulness are two technological acceptance models that replace the complexity (negative) of the innovation diffusion model and are combined into five categories: ease of use, usefulness, safety, relative advantage, and compatibility. The emotional dimension of PAD adopts the semantic difference scale, aiming at the three emotional determinants of PAD of emotional interaction after using a chatbot. The scale is based on the PAD sentiment dimension of [25], and the twelve-item semantic difference scale is modified by vocabulary. The trust survey is based on the research and development scale [26], [27], which is aimed at the user trust of B2C *CS chatbot*, including trust, professionalism, risk, reputation. The research predicts consumers' behavioral intentions for mobile services, and attitudes are regarded as a valuable variable. Attitude surveys on brands or companies are based on three attitude variables: brand cognition, brand emotion, and willingness to act.

C. Participants

This study selected 142 participants, aged 18-50 years old, with experience in using CS chatbot. The male participants accounted for 29.6%; the female participants accounted for 70.4%. 80.3% have university education or above. 62.7% are students. 35.9% of participants used chat bots occasionally; 14.8% used them frequently. Participants first conducted personal data and chatbot usage experience. secondly, finish the innovative technology models, PAD emotional dimensions and trust surveys. Finally, this study completed the comparison of experimental test samples, the use of Union Bank chatbots, and the investigation of brand attitudes.

D. Research Framework

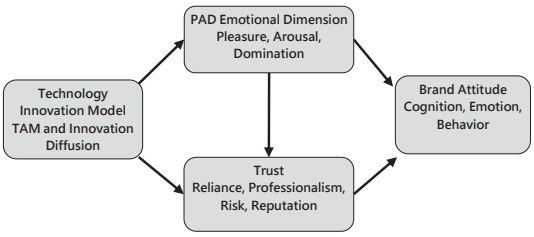

Fig.1 Relationship diagram of research variables

E. Research Hypotheses

According to the research objective, the following hypotheses were developed:

1) Users with different TIM will have different degrees of emotion dimension and trust in chatbots.
- H1: Users with higher TIM will have a higher degree emotion dimension in chatbots.
- H2: Users with higher TIM will have a higher degree trust in chatbots.

2) Users' emotion dimensions affect their trust in chatbot.
- H3: When users have a positive emotion in chatbot, they will have a higher degree of trust.

3) Users' emotion dimension and trust in chatbot affect their brand attitude.
- H4: When users have positive emotion dimension with chatbots, they have positive brand attitudes.
- H5: When users have positive trust with chatbots, they also have positive brand attitudes.

F. Data and Analysis

The study investigates whether visual and conversional cues affect users' emotional perception and trust in CS chatbot. The official test scale will be divided into "strongly disagree", "disagree", "no opinion", "agree", and "strongly agree" based on the Likert five-point scale. The higher the score, the higher the degree of recognition. The formal test will use the computer software SPSS to analyze data and perform t-tests, correlations, and variance analysis in descriptive statistics and inferential statistics. The test samples are surveyed by online questionnaires. The chatbot test provides participants with links to complete tasks and interactive dialogues. The goal of the research implementation is to require participants to obtain information and reach the latest activities, account opening enquiries, and finally complete the appointment application through the dialogue form of a chatbot.

V. Results

A. Reliability and Validity

TABLE I
Questionnaire Reliability

Item	Mean	Sd	α after item deletion	α
TIM F = 89.273, p = .000***				
Usefulness	3.659	.673	.839	.882
Ease of use	4.006	.633	.856	
Compatibility	3.456	.672	.851	
Security	3.092	.853	.898	
Relative advantage	3.866	.725	.836	
PAD Emotion Dimension F = 95.335, p = .000***				
Pleasure	3.610	0.641	.763	.805
Arousal	2.962	0.638	.733	
Dominance	3.276	0.544	.707	
Trust F = 56.289, p = .000***				
Reliance	3.518	0.748	.785	.858
Professionalism	3.738	0.684	.810	
Risk	3.014	0.892	.852	
Reputation	3.528	0.759	.834	
Brand Attitude F = 5.958, p = .003***				
Cognition	3.786	0.673	.885	.883
Emotion	3.641	0.710	.781	
Behavior	3.674	0.710	.828	

Note: *$P < .05$; **$P < .01$; ***$P < .001$

The reliability of the questionnaire is shown in Table I. The Cronbach's α coefficients were all greater than 0.7. The Cronbach's α coefficient for TIM was .882, that for PAD Emotion Dimension was .805, that for Trust was .858, and that for Brand Attitude was .883. The reliability and validity of the questionnaire was therefore acceptable. The ANOVA is also shown in Table I. The results show that TIM $F = 89.273$, $p < .000$, PAD $F = 95.335$, $p = .000$, trust $F = 56.289$, $p < .000$ and brand attitude $F = 5.958$, $p < .01$. All variances are significant. One-sample test is shown in Table II. The results showed that

only security, arousal, and risk did not reach significance, indicating that participants did not have significant differences.

TABLE II
THE ONE-SAMPLE TEST OF TIM, PAD, TRUST AND BRAND ATTITUDE

	T	df	Sig.	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Usefulness	11.665	141	.000***	.65845	.5469	.7700
Ease of use	18.935	141	.000***	1.00563	.9006	1.1106
Compatibility	8.095	141	.000***	.45634	.3449	.5678
Security	1.278	141	**.203**	.09155	-.0500	.2331
Relative advantage	14.240	141	.000***	.86620	.7459	.9865
Pleasure	11.346	141	.000***	.61033	.5040	.7167
Arousal	-.701	141	**.484**	-.03756	-.1434	.0683
Dominance	6.038	141	.000***	.27582	.1855	.3661
Reliance	8.249	141	.000***	.51761	.3936	.6417
Professionalism	12.844	141	.000***	.73768	.6241	.8512
Risk	.188	141	**.851**	.01408	-.1339	.1621
Reputation	8.297	141	.000***	.52817	.4023	.6540
Cognition	13.925	141	.000***	.78638	.6747	.8980
Emotion	10.752	141	.000***	.64085	.5230	.7587
Behavior	11.314	141	.000***	.67371	.5560	.7914

Note: *$P < .05$; **$P < .01$; ***$P < .001$

B. Hypothesis Verification

The results of analysis in Table III found that the overall PAD emotional dimension $F_{(126, 15)} = 2.912, p < .05$; pleasure $F_{(126, 15)} = 10.156, p < .000$; arousal $F_{(126, 15)} = 1.456, p > .05$; dominance $F_{(126, 15)} = 4.196, p < .01$. We assume that the three parts are confirmed. It shows that the emotional dimension of PAD will vary with the degree of innovation and technology. Users with a high degree of innovation and technology have a high emotional dimension to the use of CS chatbots. There will be higher pleasure and dominance. There are pleasant feelings during the conversation, but not necessarily excitement or stimulation.

For the participant of different innovative technologies, the overall trust $F_{(126, 15)} = 4.547, p < .01;$ Reliance $F_{(126, 15)} = 7.146, p < .000$; Professionalism $F_{(126, 15)} = 3.693, p < .01$; Risk $F_{(126, 15)} = 2.451, p < .05$; Reputation $F_{(126, 15)} = 4.948, p < .01$. Hypothesis 4 is confirmed. The results show that the degree of trust varies with the degree of innovation and technology. Users with a high degree of innovation and technology have a high degree of trust in the use of CS chatbots. Users can maintain the initiative, can generate trust in the chatbot, and believe that the professional information provided will focus on information security and brand reputation.

The results of the analysis in Table IV found that the overall trust of participants with different emotional dimensions was $F_{(56, 85)} = 3.409, p < .000$; Reliance $F_{(56, 85)} = 2.457, p < .000$; Professionalism $F_{(56, 85)} = 2.760, p < .000$; Risk $F_{(56, 85)} = 2.768, p < .000$; Reputation $F_{(56, 85)} = 2.094, p < .01$. Hypothesis 5 is confirmed. The results show that the degree of trust will vary due to different degrees of affective dimensions. Users with high emotional dimensions have a high degree of trust in using CS chatbot. When the user has a pleasant conversation process with the CS chatbot, he has positive communication emotions, and is easy to accept the information provided by the chatbot, or trust the source of the information, reduce risk awareness, and maintain a good sense of trust in the content and process of the customer service.

TABLE III
THE EFFECT OF TIM ON PAD AND TRUST

		SS	df	MS	F	*sig*
PAD	Between	36.198	126	.287	2.912	.011*
	Within	1.480	15	.099		
	Total	37.678	141			
Pleasure	Between	57.267	126	.454	10.156	.000***
	Within	.671	15	.045		
	Total	57.938	141			
Arousal	Between	53.073	126	.421	1.456	***.206***
	Within	4.338	15	.289		
	Total	57.411	141			
Dominance	Between	40.628	126	.322	4.196	.001***
	Within	1.153	15	.077		
	Total	41.780	141			
Trust	Between	57.837	126	.459	4.547	.001**
	Within	1.514	15	.101		
	Total	59.351	141			
Reliance	Between	77.539	126	.615	7.146	.000***
	Within	1.292	15	.086		
	Total	78.831	141			
Professionalism	Between	63.978	126	.508	3.693	.003**
	Within	2.063	15	.138		
	Total	66.041	141			
Risk	Between	107.024	126	.849	2.451	.025*
	Within	5.198	15	.347		
	Total	112.222	141			
Reputation	Between	79.231	126	.629	4.948	.001**
	Within	1.906	15	.127		
	Total	81.137	141			

Note: *$P < .05$; **$P < .01$; ***$P < .001$

TABLE IV
THE EFFECT OF PAD ON TRUST

		SS	df	MS	*F*	*sig*
Trust	Between	41.067	56	.733	3.409	.000***
	Within	18.284	85	.215		
	Total	59.351	141			
Reliance	Between	48.728	56	.870	2.457	.000***
	Within	30.103	85	.354		
	Total	78.831	141			
Professionalism	Between	42.611	56	.761	2.760	.000***
	Within	23.430	85	.276		
	Total	66.041	141			
Risk	Between	72.476	56	1.294	2.768	.000***
	Within	39.746	85	.468		
	Total	112.222	141			
Reputation	Between	47.037	56	.840	2.094	.001**
	Within	34.100	85	.401		
	Total	81.137	141			

Note: *$P < .05$; **$P < .01$; ***$P < .001$

The analysis results in Table V found that the overall brand attitude brand attitude $F_{(56, 85))} = 2.973, p < .000$; cognition $F_{(56, 85)} = 2.000, p < .001$; emotion $F_{(56, 85)} = 2.790, p < .000$; behavior $F_{(56, 85)} = 2.940, p < .000$. Hypothesis 6 is confirmed.

The results show that users' brand attitudes will vary due to different emotional dimensions. Users with high emotional dimensions have a positive attitude towards brands using chatbots. Users are easy to accept brand messages, have a good impression, have positive emotions about the brand, and take actions when they need products.

For participant with different levels of trust, the overall brand attitude brand attitude $F_{(40, 101)} = 4.622, p < .000$; cognition $F_{(40, 101)} = 4.643, p < .001$; emotion $F_{(40, 101)} = 3.622, p < .000$; behavior $F_{(40, 101)} = 2.637, p < .000$. Hypothesis 7 is confirmed. The results show that users' brand attitudes will vary due to different trust levels. Users who have high trust in using chatbots can easily enhance brand acceptance. Users can easily accept brand messages, extend the trust of chatbots to trust in the brand, and develop a positive attitude towards the brand.

TABLE V
THE EFFECT OF PAD AND TRUST ON BRAND ATTITUDE

		SS	df	MS	F	sig
Brand attitude	Between	36.809	56	.657	2.973	.000***
	Within	18.795	85	.221		
	Total	55.605	141			
Cognition	Between	36.302	56	.648	2.000	.002**
	Within	27.552	85	.324		
	Total	63.854	141			
Emotion	Between	46.068	56	.823	2.790	.000***
	Within	25.059	85	.295		
	Total	71.128	141			
Behavior	Between	46.818	56	.836	2.940	.000***
	Within	24.175	85	.284		
	Total	70.993	141			
Trust		SS	df	MS	F	sig
Brand attitude	Between	35.959	40	.899	4.622	.000***
	Within	19.646	101	.195		
	Total	55.605	141			
Cognition	Between	41.359	40	1.034	4.643	.000***
	Within	22.494	101	.223		
	Total	63.854	141			
Emotion	Between	41.911	40	1.048	3.622	.000***
	Within	29.216	101	.289		
	Total	71.128	141			
Behavior	Between	36.266	40	.907	2.637	.000***
	Within	34.727	101	.344		
	Total	70.993	141			

Note: *$P < .05$; **$P < .01$; ***$P < .001$

VI. DISCUSSIONS AND CONCLUSIONS

Users not only provide answers to common questions from chatbots, but also obtain in-depth consumer information. Only when users increase their willingness to give feedback or inquiries, can they provide more brand or corporate information to users. Therefore, the content and communication quality of the dialogue will affect the user's willingness to extend the dialogue. If the user's perception is poor or professional information cannot meet the user's expectations, it will easily reduce the effect of emotional interaction, which is an important challenge for designing a CS chatbot. The information and advice provided by the chatbot, the degree of personification, self-expression, and professional appearance are all factors that make participants trust the chatbot. Whether the chatbot can correctly answer the user's questions, the ability to ask questions actively, and provide useful information are regarded as key factors affecting the trust in the CS chatbot. The functions of chatbots and social abilities are also very related, and the way of communication makes users feel polite and human-like communication. Although humanization can improve the user experience of chatbots, overly humanized conversations can also reduce trust. Therefore, decisive factors such as chatbot information, privacy, and perceived safety will certainly improve the brand image in the minds of users.

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