IEEE Access
Multidisciplinary | Rapid Review | Open Access Journal

Received 2 October 2023, accepted 20 October 2023, date of publication 30 October 2023, date of current version 8 November 2023.

Digital Object Identifier 10.1109/ACCESS.2023.3328775

RESEARCH ARTICLE

Mediation Effect of Technology Adaptation Capabilities Between the Relationship of Service Quality Attributes and Customer Satisfaction: An Investigation on Young Customers Perceptions Toward E-Commerce in China

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ABSTRACT The connection between consumer satisfaction and service quality may be quite researched in academia. Pertinently, we argue that there is a gap of the contribution of "technology adaptation capabilities (TAC)" in this relationship. Hence, objective of this empirical paper is to reveal the impacts of service quality on young customers' satisfaction toward e-commerce in china, considering the mediating effect of technology adaptation capabilities. The independent factor, service quality was measured through SERVQUAL model including its five indicators: Tangibility (TAN), Reliability (REL), Responsiveness (RES), Assurance (ASR) and Empathy (EMP). Moreover, customer satisfaction is a notable concern for the organizations to exist and growth. Likewise, prior contemporary research also suggested a requirement for more empirical investigations on the current association. However, hypotheses in this present study are formulated based on the literature, and to the hypotheses, data were collected from 387 young e-commerce users from different cities in China used judgmental sampling method. For analyzing the data structural equation (PLM-SEM) model have been utilized. The result shows that all five indicators contribute to customer satisfaction. Additionally, with the mediation of technology adaptation capabilities, all factors have significant effects on customer satisfaction. This research intended to contribute to the researchers, professionals, investors, executives, and other stakeholders by broadening the profound insights on e-commerce.

INDEX TERMS Service quality, satisfaction, technology adaptation capabilities, young customers, e-commerce.

I. INTRODUCTION

Recent pandemic and global challenges have led to significant transformation in the E-commerce industry due to the necessity of social distancing [1], [2]. This has resulted in all sectors of the economy moving their operations in virtually [1]. Internet and mobile technology development has also contributed to the increasing importance of online shopping, as noted by Omar et al. [3]. In addition, Omar et al. [3] pointed out that E-commerce facilitates retailers to promote their company's products and provide purchasing options even when consumers are not present in the shop. This underscores the significance of the electronic commerce concept, which focuses on the ability to conduct business operations,

The associate editor coordinating the review of this manuscript and approving it for publication was Justin Zhang.

including buying, selling, and advertising, while on-the-go, as emphasized by Kim et al. [4]. In this concern, Kim et al. [4] argued that the present buying environment and E-commerce are no longer exclusively connected previously linked with desktop computers, but now mainly with smartphones and tablets.

Notably, as customers prefer online shopping platform more, their perception on satisfaction towards a particular product or service are also depend on the e-commerce business [5]. Meanwhile, according to Alnaser et al. [6] and Hung et al. [7], the provision of intangible assets, such as order tracking, product details, consumer reviews, and comparative products' prices, are closely associated with service quality in the context of e-commerce. As a result, e-commerce services can enhance customer satisfaction with their quality of service. In the present day, the significance of e-service quality has increased significantly [8], as it is not only used to assess the success or failure of a business but also plays a pivotal role in defining the experiences of individual customers in this ever-changing and highly collaborative online platform [9], [10]. Internet technology has become an invaluable asset in gaining a competitive edge in businesses and has a tremendous impact on our daily routines.

However, the primary reasons of emerging this e-commerce platform are the convenience and time-saving benefits offered by the internet technology. And, that is why customers are also opting for it [2], [11], [12]. It has revolutionized the traditional business practices and left a profound impact on the lives of people. As customers seek effortless buying and selling procedures, companies are prioritizing the enhancement of their technological systems [13], [14], [15]. Based on the preceding viewpoint, electronic commerce involves utilizing electronic technologies and means to facilitate commercial transactions in a variety of contexts, including B2B and B2C settings [16], [17]. According to Reichheld and Schefter [18], offering superior service on a website leads to higher customer satisfaction with e-service adoption.

Furthermore, if the website is difficult to use and lacks appropriate content, it can result in a loss of customer trust and harm the company's image. In their examination based on e-commerce, Ghani et al. [19] stated that electronic service delivery standards can be evaluated and compared by customers' perceptions in real-time. As per Rowley [20], e-commerce pertains to the actions, efforts, or performances of customers that are facilitated by ICT. Earlier research in the e-commerce realm suggests that providing current, precise, and pertinent information to potential customers can improve their satisfaction and purchase intentions [21]. Accurate information about a company's products or services can motivate customers to make purchases and increase their satisfaction levels [22], [23], [24].

Nonetheless, Parasuraman et al. [25] investigated the five SERVQUAL model aspects of tangibility (TAN), reliability (REL), responsiveness (RES), assurance (ASR), and empathy (EMP); a substantial number of prior scholars also supported this conceptualization of measuring the service quality [26], [27], [28]. The present study further implies to measure the service quality of e-commerce usage by young users in China and investigate its contributions to their satisfaction. The objective of this study is to examine the influence of various dimensions of service quality, namely TAN, REL, RES, ASR, and EMP, on the satisfaction levels of young Chinese customers who undertake online shopping. While previous research has explored service quality, satisfaction, and technology adaptation capabilities (TAC) in Chinese e-commerce, there remains a research gap regarding the impact of demographic constructs, i.e., age, gender, education level, and income, on young customers' technology adaptation abilities. The relationship between technology adaptation skills, consumer happiness, and demographic factors requires further examination. Additionally, there is a need for additional research on the service quality aspects proposed by Parasuraman et al. [25] and their impact on the satisfaction of young Chinese e-commerce clients.

Based on the discussions above, this study aims to assess the correlation between ''service quality'' and ''user satisfaction'' with the mediating role of TAC, explicitly focusing on the perceptions of young consumers towards E-Commerce in China. Based on the objectives of the study, we endeavor to answer the following research questions:

RQ1: What are the relationships between service quality and TAC of the young customers towards e-commerce in China?

RQ2: What are the relationships between and technology adaptation capabilities and satisfaction of the young customers in China?

RQ3: Does TAC have mediating role between the association of service quality and satisfaction?

Moreover, we propose the following research framework in Figure-1 initiated from authors' own creation:

II. LITERATURE REVIEW

A. THEORETICAL CONCEPTUALIZATION: THE SERVQUAL MODEL

The SERVQUAL model, one of the earliest approaches to measuring and improving service quality, is a diagnostic tool that may be used to assess where an organization excels and where it falls short [29]. To address this issue of how to quantify the service quality, Parasuraman et al. [25] initiated the SERVQUAL concept through exploratory research. This model includes emphasis groups and exhaustive interviews with company executives. Parasuraman et al. [30] noted that SERVQUAL's evolutionary approach makes it a significant addition to the marketing literature. Many researchers favour the SERVQUAL model, which proposes a ten-dimensional construct made up of such factors as tangibility reliability, responsiveness, competence, access, courtesy, communication, credibility, security and understanding or knowing the client [26], [27]. Besides, Parasuraman et al. [30] conducted a series of factor analyses and found a significant association between these variables. In light of this, researchers created

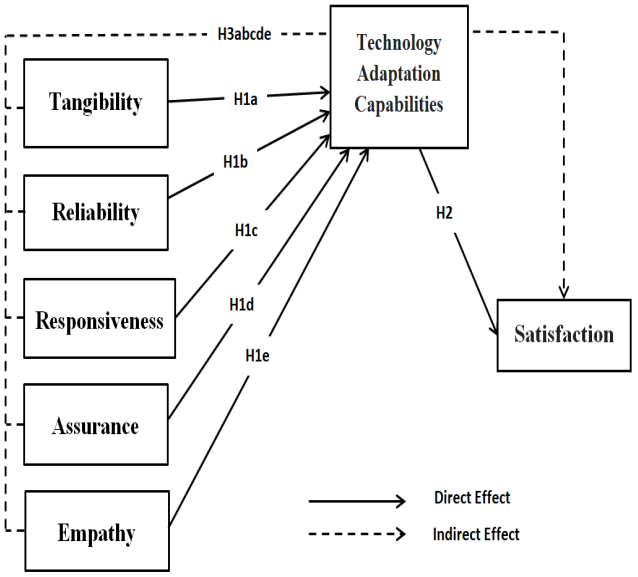

FIGURE 1. Research framework.

a simplified version of the SERVQUAL model with just five factors, i.e., TAN, REL, RES, ASR, and EMP, TAC [28].

However, Parasuraman et al. [25] conveyed the subsequent definitions regarding each of the five (5) components: The tangibility of an organization refers to its physical assets, such as buildings, equipment, and employees.

Reliability, on the other hand, pertains to the organization's capacity to consistently and accurately deliver the promised service. Responsiveness denotes the organization's willingness to assist customers promptly and provide timely service. Assurance encompasses the knowledge, respect, and capacity of the company's staff members to inspire trust and confidence. Lastly, empathy signifies the organization's inclination to care for every client and customize its service accordingly.

Furthermore, the SERVQUAL's application spans a wide range of services, making it a generally acknowledged technique for assessing the quality of services [31]. Many businesses and organizations, from the government to the hospitality sector, have adopted it [32], [33], travel and tourism industry [34], libraries and information services [35], healthcare [36], educational services [37], telecommunication centers [38], e-government services [39], fiscal agencies [27], and logistics [40], among others.

The SERVQUAL concept has acquired significant acceptance as a comprehensive model for evaluating the service quality of consumers or users in various industries, although it has been subject to theoretical, operational, philosophical, and empirical critique. The originally developed SERVQUAL queries and multidimensional scales i.e., SERVQUAL being a greater likelihood to be unidimensional in nature rather than 5 dimensional in constructs that have been modified by numerous domain experts to fit certain contexts [41], [42]. Moreover, given the variety of service models out there, some writers argue that the tilt of dimensions ought to be tweaked, i.e., suitable exclusion and inclusion of dimensions [43], [44]. The incapability to further improve on the identified weak points of service quality was also noted by Tan and Pawitra [45] as a major shortcoming of the SERVQUAL model. In this study, we analyze the selected components of the SERVQUAL framework, invented by Parasuraman et al. [25], contributing to the satisfaction of young Chinese internet shoppers by measuring the service quality they accept when shopping online.

B. SATISFACTION

As stated by Parasuraman et al. [25], customer satisfaction is defined as the extent to which a customer is pleased with a product or service after using it. Customers are more likely to make repeat purchases from a different mobile commerce podium if they obtain the finest value and good services from the service source than they are to make subsequent purchases from one particular mobile commerce platform in the context of e-commerce. Kim et al. [4] added that repeat customers who have had favorable experiences with e-commerce apps are most likely to be devoted shoppers. Consumer satisfaction has been found to improve brand loyalty, which subsequently, in turn, boosts business productivity and profitability [46]. It's cheaper for firms to keep the clients they already have if they focus on making them happy [47]. Therefore, the customer satisfaction is crucial to a company's growth, survival, and bottom line.

C. TECHNOLOGY ADAPTATION CAPABILITIES

Technology Adaptation Capabilities (TAC) is the ability of individuals or organizations to efficiently adopt, integrate, and utilize new technologies. Venkatesh et al. [48] defined TAC as a multi-dimensional construct that encompasses cognitive, behavioral, and affective aspects. The cognitive aspect of TAC pertains to an individual's knowledge and comprehension of the technology, including its potential benefits and the means to use it effectively [49]. Individuals with high behavioral TAC possess the necessary skills to effectively use technology, such as proficiency in using software or hardware [50]. They can quickly learn and adopt new technologies without much difficulty [49], leading to improved performance and productivity.

Affective TAC, on the other hand, refers to an individual's emotional response to technology use. It includes factors such as enjoyment, comfort, and confidence in using technology. Individuals who possess a substantial amount of stimulating technology acceptance can exhibit favorable reactions towards technology, resulting in increased levels of pleasure with its utilization [48]. Overall, TAC is an important concept that can influence the satisfaction and success of technology adoption. Individuals with high behavioral TAC are better able to use new technologies effectively and efficiently, which can lead to higher productivity and satisfaction with technology use [48].

D. SERVICE QUALITY AND TAC

Service quality (SQ) assessment is crucial in determining consumer endorsement, loyalty, and commitment. To evaluate SQ, the widely recognized SERVQUAL model incorporates five dimensions: TAN, REL, RES, ASR, and EMP. Pertinently, TAC represents the ability of an organization to adopt and utilize new technologies efficiently [51]. Studies have found that SQ and TAC are interconnected and significantly affect consumer satisfaction and technology adoption. For instance, a study conducted by Wu and Chen [52] showed that TAC had a positive effect on SQ and both positively influenced customer satisfaction with technology use.

However, TAC can affect the reliability dimension of the SERVQUAL model, which refers to the organization's ability to provide consistent and accurate services [51]. By adopting and using new technologies effectively, an organization can enhance the consistency and accuracy of its service delivery. Similarly, TAC can influence the responsiveness dimension of the SERVQUAL model by enabling organizations to use new technologies to improve the speed and efficiency of their service delivery [48]. In conclusion, SQ and TAC are interconnected, and organizations that focus on improving both are most likely to achieve greater levels satisfaction of the customers and technology adoption.

Hence, the following formulation of hypothesis 1, including service quality:

Hypothesis 1a: Tangibility has a significant influence on TAC.
Hypothesis 1b: Reliability has a significant influence on TAC.
Hypothesis 1c: Responsiveness has a significant influence on TAC.
Hypothesis 1d: Assurance has a significant influence on TAC.
Hypothesis 1e: Empathy has a significant influence on TAC.

E. TAC AND SATISFACTION

Satisfaction with technology use is a crucial factor that depends on an individual's or organization's TAC. According to the findings of Davis et al. [53], satisfaction associated with technology usage refers to an individual's overall favorable or adverse reactions related to the utilization of a specific technology. Evidence from several pieces of research shows a link between TAC and satisfaction, including technology usage. For example, Venkatesh et al. [48] discovered that TAC significantly predicts user satisfaction with information technology. Similarly, Wang and Shih [50] found that individuals with higher TAC were more content with information kiosks use. One reason for this relationship is that individuals or organizations with higher TAC can overcome obstacles to technology adoption better. They may understand the technology's benefits and how it can be used to achieve their goals, making them more likely to use the technology effectively and achieve positive outcomes, resulting in higher satisfaction [48]. Furthermore, those with higher TAC may be more adaptable to technological changes. For instance, they may be more open to trying new technology features, integrating new technologies into their existing processes, and this adaptability can lead to higher levels of satisfaction with technology use [50].

In accordance with the earlier contention, this study can hypothesize the following hypothesis:

Hypothesis 2: TAC has a significant influence on Satisfaction.

F. TAC AS A MEDIATOR

Several scholars in their studies explored TAC that can be connected with e-commerce, quality of service and customers' satisfaction. Additionally, researchers also imply the SERVQUAL concept to uncover the demonstration of the moderating effects of service quality measurement on consumer satisfaction. For example, Rubel et al. [54] explored TAC as the mediating factor among workforce policy, employee technical performance, and customer satisfaction. In another research, Bansler and Havn [55] conducted a technology-focused study where they revealed the impacts of TAC on the satisfaction of online product users. Additionally, Bansler and Havn [55] found similar kind of results in the communication technology field of research.

However, Shire et al. [56] discussed that TAC is a critical factor while examining the satisfaction of consumers who use technical products through e-commerce in Canada. Kurniawan et al. [57] identified the effects of TAC on public financial support while consumers are utilizing e-commerce products. Furthermore, Kim et al. [4] revealed that TAC plays a mediating role, facilitating the favorable association between the SQ of e-commerce use and consumer satisfaction, ultimately leading to a higher chance of repeating customers' purchases on a similar platform. Besides, Omar et al. [3] emphasized the significance of TAC in online shopping satisfaction and its strong relationship with e-commerce services. Thus, the above literature discussion supports the idea, i.e., customers' contentment, SQ, and TAC are effective metrics for evaluating an e-commerce-based service provider's performance [8]. Therefore, the current research advances the following hypotheses in light of the literature review above:

Hypothesis 3a: TAC mediates the relationship between Tangibility and Satisfaction.
Hypothesis 3b: TAC mediates the relationship between Reliability and Satisfaction.
Hypothesis 3c: TAC mediates the relationship between Responsiveness and Satisfaction.
Hypothesis 3d: TAC mediates the relationship between Assurance and Satisfaction.
Hypothesis 3e: TAC mediates the relationship between Empathy and Satisfaction.

III. METHODOLOGY

A. RESEARCH DESIGN, MEASUREMENT, AND SCALING

This research examines the possible connection between the factors recommended by Cooper and Schindler [58] using adequate and relevant data. The present study has collected cross-sectional data [59] through a structured questionnaire. When testing the potential connection between the specified variables and constructs, a questionnaire survey is an effective research strategy representing the participants' perceptions [60]. Each latent construct was measured using an assortment of indicators in this investigation. Using a 5-point ''Likert scale,'' respondents were asked to select how strongly they disagreed, neutral, agreed, or strongly agreed with each indicator. Several items on the questionnaire were determined by the researchers to be able to measure distinct latent components. Both Umoke et al. [61] and Kassim et al. [62] served as sources for the variables used in this study. In addition, the scales were adapted from prior studies such as tangibility [43], reliability [64], responsiveness [62] and [64], assurance [62] and [64], empathy [61], and technology adaptation capabilities [65] were measured via five indicators each. Conversely, satisfaction was measured using six indicators collected from Kassim et al. [62] and Rita et al. [66]. Appendix-A illustrates all the scale statements based on the present constructs.

B. TARGET POPULATION, UNIT OF ANALYSIS, AND SAMPLING METHOD

The present research selected the demographic of young users of e-commerce-based services in China as its ''target population''. The criterion for unit of analysis was young e-commerce users who are residing in any cities in China; age was between 18 and 26. The authors of this paper employed a non-probability sampling strategy known as ''judgmental sampling'' for their research. Considering the opinion of the researchers, the respondents were selected from all cities of Jiangxi province in China because of easier data accessibility. Additionally, based on earlier research and the authors' own experience, most young e-commerce users are belonging to an age group of 18 to 26 [67], [68]. In context of China, most of the interested young participants in research contribution from e-commerce users are also in between these ages [69], [70]. The reasons to use judgmental sampling in this study are: firstly, the total population is unknown and the sampling frame is not available [70]. Secondly, it makes the research accomplishable in terms of financing. Thirdly, the data is tranquil to access and save time [71]. And, fourthly, any non-probability sampling technique used carefully produces reliable study results [58]. As this study primarily serves to anticipate and demonstrate the links between a number of variables, rather than draw broad judgments about the population as a whole, the authors opted for judgmental sampling for the aforementioned reasons.

When the survey was carried out, there were a total of 418 people who responded to the questionnaire. The current study used the threshold that was suggested by Malhotra and Dash [71] to assess the size of the total sample. The findings of Malhotra and Dash [71] showed in case of structural equation modelling, each construct should be measured with at least three items in any research, and communalities must be at least 0.5 alternatively, a sample size of at least 200 is required. In this research, six implicit variables were assessed using at least five items, while one variable used six items. As a result, we think the sample size we've chosen is adequate for our needs. The study's 1,000 respondents were polled using both online and traditional methods. Several non-respondents, missing responses, and straight-liners were uncovered during the questionnaire screening process. In the end, 418 complete surveys were kept for further study. To conclude, 418 people in total have been included in the analysis, which is more than the minimum (386) required by Kline [72] and Faul et al. [73]. In addition, this generated a usable response frequency of 41.8%, which is greater than the rates seen in earlier research [such as [54] (33%) and [74] (34%)].

C. PRE-TEST AND PILOT STUDY

The researchers in this study used a structured survey format. To ensure that the survey items are clear to participants, a debriefing test was conducted with 16 respondents (including 12 young e-commerce users, 2 academicians, and 2 professional researchers) [91]. Respondents were closely monitored as they filled out the survey and asked to discuss any areas in which they struggled to grasp the questions. The questions, including their language and order, were drafted using data gathered from pilot studies. For the benefit of the discouraged, a survey questionnaire was created in both Chinese and English. In addition, the authors ran a pilot study to determine whether or not the research mechanism was adequate, as well as to assess whether or not the full scale could be successful [75]. Forty people were chosen at random to take part in the pilot test [76], which is equivalent to about 10% of the entire sample size. The internal consistency of the scales was determined to be more than 0.7 in the pilot study, demonstrating that the minimum requirement was met [77].

D. COMMON METHOD BIASNESS TEST

The authors implemented the suggestions put forth by Podsakoff et al. [78] by minimizing the scale length and modifying the order of survey factors to mitigate the effects of common method biases (CMB). The confidentiality of the participants' responses had also been guaranteed. The current study also tested ''Harman's single factor test'' [79] to statistically detect CMB. According to this method, CMB will not be a substantial problem in the measuring procedure if one component does not account for most (50 percent or more) of the co-variance among the variables and factors that ensured by Podsakoff et al. [78] research. According to this study, a single latent factor that has not been rotated accounts for less than 50% of the variation, or 23.76% (see Appendix-B).

TABLE 1. Demographic information of the respondents.

Variables	Description	Frequency (n=418)	Percentage
Age	18-20 years	118	28.23%
	21-23 years	239	57.18%
	24 and above	61	14.59%
Education	Diploma	103	24.64%
	Graduate	237	56.70%
	Postgraduate	78	18.66%
Gender	Male	202	48.33%
	Female	216	51.6%7
Experience	1 to 3 years	116	27.75%
	4 to 6 years	218	52.15%
	7 and above	84	20.10%
Marital Status	Married	31	7.42%
	Unmarried	387	92.58%

Therefore, it's possible that CMB won't cause any major issues in this paper.

E. DATA ANALYSIS TECHNIQUES AND TOOLS

The present study used Excel 2010 to input and organise data. Additionally, an overview of the participants' demographic details was generated using SPSS software. Additionally, this examination employed PLS-SEM software to evaluate both the measurement and structural model. PLS-SEM, a statistical analysis method that prioritizes prediction, exhibits strong performance when applied to datasets with non-normal distributions and smaller sample sizes [80]. This makes it preferable to co-variance-based SEM. Predictions are based on an analysis of numerous factors, but the primary focus is on the happiness of young people who shop online. As a result, the use of PLS-SEM with Smart-PLS is warranted in this study because of the predictive value it provides. In addition, Smart-PLS was chosen over AMOS because it can return results from both a sophisticated measurement and a structural model at once [74].

IV. ANALYSIS AND RESULTS

A. DEMOGRAPHIC PROFILE

The demographic information of the respondents is shown in Table 1 for three different age groups: 18-20, 21-23 and 24-above. The results suggest that most respondents are between the ages of 21 and 23 (239). Furthermore, those between the ages of 18 and 20 make up only 118 of the respondents, while those aged 24 and up equal 61, indicating that China's more young citizens are keen to use more about e-commerce.

Table 1 also shows the distribution of education levels; a bigger proportion of those with a graduate's or higher has that degree. There isn't much else that the scores of Diploma-103 and Postgraduate-78 may be compared to. Conversely, 31 people identify as married and 387 as single. Both married and single people in China are interested in e-commerce use, as seen by the marriage rate. There were 116 participants' have 1-3 years of experience of using e-commerce, 218 of 4-6 years and, 7-above years of using experience of e-commerce of 84 participants. Fair respondents are assumed to have a strong understanding of how customers of different age, experience and marital groups perceive e-commerce services.

B. MEASUREMENT MODEL

The measurement model was initially evaluated in this study by applying confirmatory factor analysis (CFA) to assess the latent constructs' reliability and validity. Reliability was determined by composite reliability (CR) and Cronbach's alpha scores. In Table 2, all values of Cronbach's alpha as well as CR are above the threshold point of 0.7, indicating sufficient reflective constructs' reliability for the research.

Furthermore, ''convergent validity'' was established based on ''factor loadings'' and average variance extracted, in short, AVE scores. If the factor loading values show above 0.7 and AVE scores greater than 0.6 provide evidence regarding a construct's convergent validity [80]. All factor loadings of this research represent the associations between items and constructs, were greater than the satisfactory level of 0.7 and AVE, which represents the degree of variance in the items, explained by latent constructs, values were above the suggested level of 0.6, proves adequate convergent validity score recommended by Hair et al. [80]. Subsequently, discriminant validity, which implies how much one construct is distinct from another construct, was assessed based on Fornell-Larcker criterion [81] and heterotrait-monotrait (HTMT) ratio of correlations [82].

In accordance with Fornell-Larcker criterion, Table 3 shows that the square root of AVE of all the constructs (bolded diagonal values) are greater than their correlation coefficients (off-diagonal values), signifying satisfactory discriminant validity. Moreover, according to Henseler et al. [82], all the HTMT values should be below 0.85 to establish discriminant validity. As shown in the Table 4, all the constructs' HTMT values are below the cut-off point of 0.85, specifying that discriminant validity has been established in this study [82].

C. STRUCTURAL MODEL

The researchers employed PLS-SEM to measure the ''structural model'' and to assess the postulated associations. Firstly, the current model's explanatory power was determined based on R^2 values.

In this study, R^2, which represents a predictor's explanatory power on outcome construct, value for TAC was 0.586; representing that 58.6 per cent variance in the TAC is explained by TAN, REL, RES, ASR, and EMP. Furthermore, R^2 for consumer satisfaction was 0.161, implying that 16.1 percent variance in the satisfaction was explained by TAN, REL, RES, ASR, and EMP, and TAC. Moreover, blindfolding technique was applied using omission distance 7 to assess the path model's predictive

TABLE 2. Measurement model (CFA outputs).

Constructs	Item Codes	Item Loadings	Cronbach's Alpha	CR	AVE
Tangibility	TAN1	0.855	**0.904**	**0.928**	**0.722**
	TAN2	0.884			
	TAN3	0.891			
	TAN4	0.812			
	TAN5	0.803			
Reliability	REL1	0.810	**0.923**	**0.943**	**0.768**
	REL2	0.900			
	REL3	0.929			
	REL4	0.812			
	REL5	0.923			
Responsiveness	RES1	0.819	**0.829**	**0.886**	**0.661**
	RES2	0.826			
	RES3	0.828			
	RES4	0.779			
Assurance	ASR1	0.843	**0.902**	**0.927**	**0.719**
	ASR2	0.906			
	ASR3	0.899			
	ASR4	0.818			
	ASR5	0.765			
Empathy	EMP2	0.776	**0.850**	**0.898**	**0.689**
	EMP3	0.796			
	EMP4	0.871			
	EMP5	0.873			
Technology Adaptation Capabilities	TAC1	0.865	**0.768**	**0.866**	**0.684**
	TAC3	0.860			
	TAC5	0.752			
Satisfaction	STF1	0.897	**0.927**	**0.948**	**0.819**
	STF2	0.925			
	STF4	0.920			
	STF6	0.877			

[Note:
The items such as, EMP1 (0.652), RES5 (0.658), TAC2 (0.392), TAC4 (0.316), and STF3 (0.491), STF5 (0.650) had to be removed for showing poor loading score < 0.70).]

relevance. It was found that Stone-Geisser's Q^2 value [83], [84] for both the endogenous constructs were above zero ($Q^2_{TAC} = 0.391$ and $Q^2_{STF} = 0.129$) in Table 5, indicating acceptable cross validated predictive relevance of the path model [80].

Furthermore, this study also found that VIF values in Table 6 for all the constructs were below 3.3, signifying no issues of multicollinearity [74], [85].

D. HYPOTHESES TESTING RESULTS (DIRECT EFFECTS)

Subsequently, a bootstrapping process (one-tailed) was applied using 5000 subsamples to discover the path-coefficients' weights and significance [80].

As evident from Table 7, the paths from TAN to TAC ($\beta = 0.166$; p <.05), REL to TAC ($\beta = 0.149$; p <.05), RES to TAC ($\beta = 0.502$; p <.05), ASR to TAC ($\beta = 0.142$; p <.05), EMP to TAC ($\beta = 0.169$; p <.05), and TAC to STF

TABLE 3. Discriminant validity (Fornell-Larcker Criterion).

	ASR	EMP	REL	RES	STF	TAN	TAC
ASR	**0.848**						
EMP	0.108	**0.830**					
REL	0.143	0.157	**0.876**				
RES	0.282	0.221	0.322	**0.813**			
STF	0.079	0.165	0.248	0.283	**0.905**		
TAN	0.139	0.273	0.246	0.330	0.287	**0.850**	
TAC	0.347	0.364	0.399	0.683	0.402	0.435	**0.827**

TABLE 4. Discriminant validity heterotrait-Monotrait (HTMT) ratio.

	ASR	EMP	REL	RES	STF	TAN	TAC
ASR							
EMP	0.124						
REL	0.149	0.170					
RES	0.326	0.260	0.369				
STF	0.087	0.179	0.271	0.322			
TAN	0.151	0.313	0.268	0.377	0.309		
TAC	0.412	0.447	0.471	0.851	0.467	0.517	

TABLE 5. Predictive relevance of the dependent variables.

Dependent Variables	R^2	Adjusted R^2	Q^2 Values
Technology Adaptation Capabilities (TAC)	0.586	0.581	0.391
Satisfaction (STF)	0.161	0.159	0.129

TABLE 6. VIF values for constructs.

	ASR	EMP	REL	RES	STF	TAN	TAC
ASR							1.094
EMP							1.109
REL							1.151
RES							1.291
STF							
TAN							1.203
TAC						1.000	

($\beta = 0.402$; $p < .05$) are positive and statistically significant (Figure-2).

Therefore, H1a, H1b, H1c, H1d, H1e, and H2 were strongly supported. Based on the aforementioned outputs, the researchers confirm that greater degree of TAN, REL, RES, ASR, and EMP lead to higher degree of favorable perception towards TAC of the young e-commerce users in China. On the other hand, favorable perception about TAC increases the satisfaction of the young e-commerce users in China.

E. HYPOTHESES TESTING RESULTS (MEDIATING EFFECTS)

In addition, the present study also determined the indirect or mediating effect of TAC in the relationships among TAN, REL, RES, ASR, and EMP with STF. To investigate the mediating relationship, we have employed product of coefficient approach [86], which suggests mediation can be possible when the specific indirect effects are significant. Scholars previously argued that when zero does not appear between the indirect paths' lower limit and upper limit confidence intervals, the indirect effects can be considered significant

Table-8 demonstrates that as per the aforementioned criteria, all the specific indirect effects are significant.

Hence, it can be concluded that TAN, REL, RES, ASR, and EMP indirectly affect user's satisfaction though positive perceptions about TAC. Consequently, H3a, H3b, H3c, H3d, and H3e have been strongly supported.

V. DISCUSSION

The study's specific objectives were used to provide a comprehensive account of the results achieved in order to attain the overall objective. The conclusions are drawn from the measurement model, namely that the model's fitness results in reliability and validity are strongly supported, as previously

TABLE 7. Hypotheses testing (Direct effects.)

Hypotheses	Paths	Std. Beta	Std. Error	T Statistics	P Values	2.5% LLCI	97.5% ULCI	VIF	Decisions
H1a	TAN → TAC	0.166	0.163	4.572	0.000	0.093	0.243	1.203	Supported
H1b	REL → TAC	0.149	0.150	4.722	0.000	0.083	0.207	1.151	Supported
H1c	RES → TAC	0.502	0.505	8.366	0.000	0.361	0.614	1.291	Supported
H1d	ASR → TAC	0.142	0.143	3.718	0.000	0.070	0.219	1.094	Supported
H1e	EMP → TAC	0.169	0.168	3.896	0.000	0.079	0.245	1.109	Supported
H2	TAC → STF	0.402	0.401	11.177	0.000	0.341	0.480	1.000	Supported

Notes: *Tangibility=TAN; Reliability=REL; Responsiveness=RES; Assurance=ASR; Empathy=EMP; TAC = Technology Adaptation Capabilities; VIF= Variance Inflation Factor; LLCI = Lower Limit Confidence Interval; ULCI = Upper Limit Confidence Interval; S = Supported*

demonstrated. It has been established that the measurement model falls within the appropriate threshold ranges. Thus, ensuring sufficient internal consistency (as indicated by Alpha, CR, and AVE values) for all variables can fulfill the requirements for the model's reliability.

The significant effects identified for the proposed structural model are displayed in Tables 8. Results from the t-test are utilized for significance analysis. The result from Table 8 designates that Tangibility has a noteworthy positive impact on TAC as supported by Hulland et al. [88]. This conclusion is drawn based on the statistical values obtained from the analysis. The results indicate that there is a positive linear relationship between Tangibility and TAC. The P value confirms the statistical significance of the relationship between the two variables. The VIF value suggests that there is no significant multi-collinearity issue between the independent variables. As a result, H1a is accepted, which implies that e-commerce service providers in the country under study have adopted excellent, modern, and updated tools and equipment, and that they are well-dressed and exhibit a professional behavior.

Overall, these results suggest that the e-commerce service providers are efficient in adapting to new technologies, and are maintaining a professional image while doing so which have the same findings as Amin and Rubel [74].

Reliability, a variable being studied, has a significantly positive influence on TAC as the same result of Nitzl et al. [87]. The beta value indicates that there is a positive linear relationship between Reliability and TAC. The T value suggests that the correlation between Reliability and TAC found statistically significant. The VIF value suggests that there is no significant multi-collinearity issue between the independent variables, as a result, H1b is supported. Numerous scholarly investigations have been undertaken to explore the connection between service quality and customer satisfaction. Notable contributions in this area include the similar works (for example, [8], [28], [56], [88], and [89]. These researches have yielded conclusions that align, to a large extent, with the outcomes of the present study. The acceptance of hypothesis H1b suggests that the e-commerce service providers in the country under study are meeting their promised time-frames for response, and the physical facilities of these providers are appropriate for the type of services provided. Overall, these results suggest that the e-commerce service providers in the country under study are reliable in terms of their service delivery, which helps them to adapt well to new technologies and maintain a good professional image which has the same results of Wang et al. [50].

Present study proves that responsiveness has a significant positive influence on TAC. The value of Beta, a standardized regression coefficient, is 0.502, which indicates that there is a strong positive linear relationship between Responsiveness and TAC which supported by Rubel et al. [65]. The P value of 0.000 confirms the statistical significance of the relationship between the two variables. The VIF value of 1.291 suggests that there is no significant multi-collinearity issue between the independent variables, as a result H1c is also supported. The acceptance of hypothesis H1c implies that the e-commerce service providers in the country under study are highly responsive to their customers' needs and concerns.

In respect to service quality and customer satisfaction, a number of research have been undertaken (for example, [4],

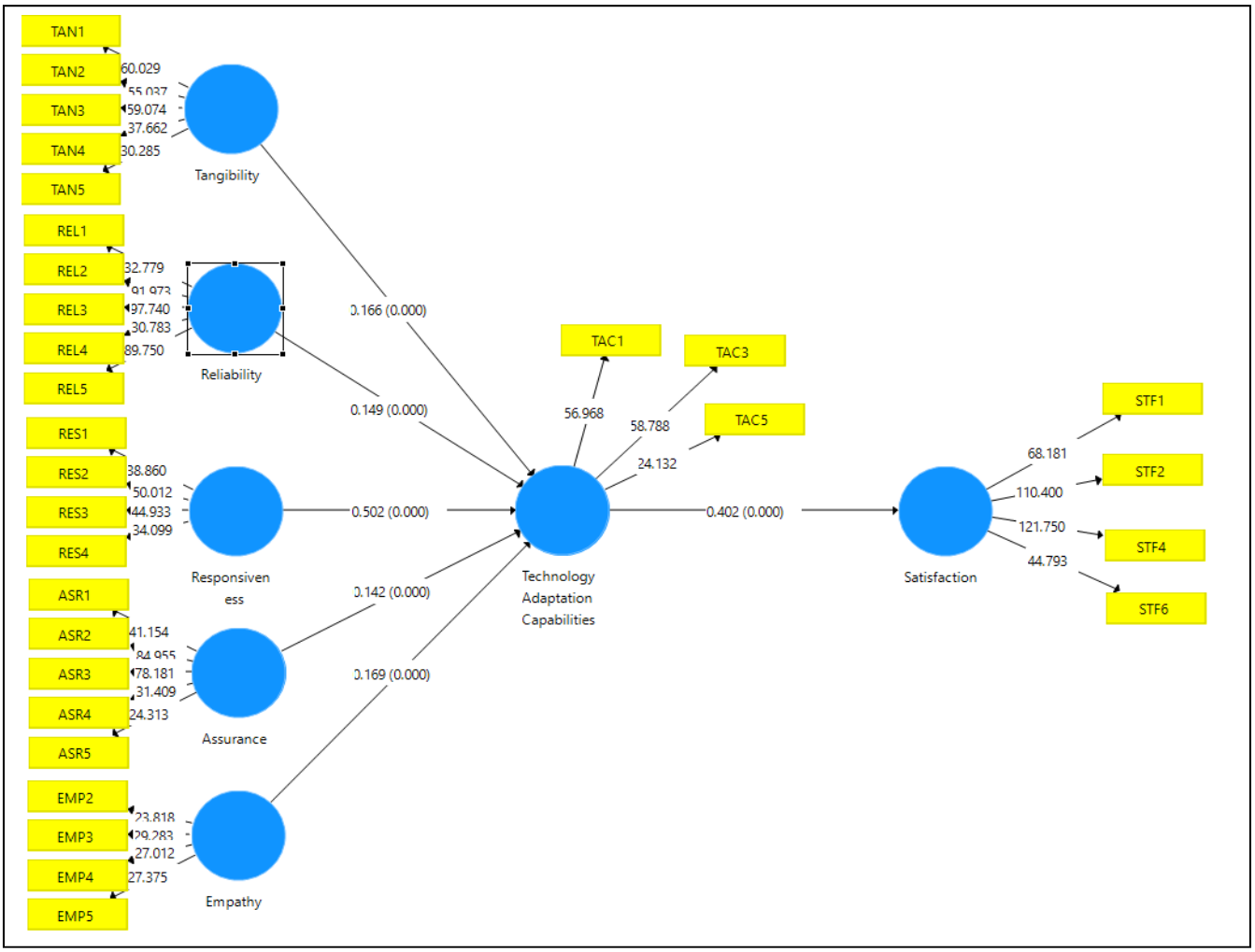

FIGURE 2. Structural model.

[24], [88]) and have discovered conclusions that are more or less similar to the findings of the present study. They perform the service right the first time, are dependable, and are ready and willing to help their customers. Overall, these results suggest that the e-commerce service providers in the country under study are highly responsive, which helps them to adapt well to new technologies and maintain a good professional image.

The current research argued that Assurance has a significant positive influence on TAC. The Beta and T value indicates a positive linear relationship between Assurance and TAC. The P value confirms the statistical significance of the relationship between the two variables. The VIF value of 1.094 suggests that there is no significant multi-collinearity issue between the independent variables. The acceptance of hypothesis H1d implies that the e-commerce service providers in the country under study have a high level of Assurance in their service delivery. They are consistently courteous and polite with their customers and have their customers' best interest at their minds which have the same result of Kim et al. [4]. Several other researches on the topic of service quality and customer satisfaction have reached similar conclusions (for example, [7], [13], [22], [69], [70]).

The findings of this study demonstrate that Empathy has a significant positive influence on TAC. The Beta, T, and P values indicate that there is a positive linear relationship between Empathy and TAC. The P value confirms the statistical significance of the relationship between the two variables. The VIF value suggests that there is no significant multi-collinearity issue between the independent variables. The acceptance of hypothesis H1e implies that the e-commerce service providers in the country under study have a high level of Empathy in their service delivery. They pay attention to the customer's needs and are genuinely interested in helping and satisfying them. When customers ask about facilities or information that they need immediately, the e-commerce service providers provide clear direction to them. This suggests that the e-commerce service providers in the country under study are focused on providing excellent customer service and have a high level of empathy towards their customers which have the same result of Amin and Rubel [74].

TABLE 8. Specific indirect effect.

Hypotheses	Paths	Std. Beta	Std. Error	T Statistics	P Values	2.5% LLCI	97.5% ULCI	Decisions
H3a	TAN → TAC → STF	0.067	0.065	4.102	0.000	0.033	0.097	Supported
H3b	REL → TAC → STF	0.060	0.060	4.088	0.000	0.033	0.090	Supported
H3c	RES → TAC → STF	0.202	0.202	7.216	0.000	0.150	0.257	Supported
H3d	ASR → TAC → STF	0.057	0.057	3.539	0.000	0.027	0.090	Supported
H3e	EMP → TAC → STF	0.068	0.067	3.598	0.000	0.031	0.106	Supported

The statistical value of present study suggests that the variable of TAC has a significant and positive influence on customer satisfaction. This is supported by the fact that the P value, Beta value T statistic, indicating that this relationship is highly significant. Furthermore, the VIF of 1.00 indicates that there is no multi-collinearity issue between the independent variables, based on these results, it can be concluded that H2 is accepted, which suggests that the behavior of employees and E-commerce service providers in your country instill confidence in customers and are seen as trustworthy, resulting in strong customer satisfaction. In summary, these findings highlight the importance of TAC in enhancing customer satisfaction, and emphasize the need for e-commerce service providers to invest in their technological capabilities to improve the overall customer experience [92].

Other studies (for example, [3], [28], [39] [56], [66]) reported findings that were more or less identical to those of the current study.

However, Table 8 shows the mediation analysis, which assessed the mediating effect and significance level using t values and the differences in the confidence interval. The findings indicate that technology adaption capabilities mediated all five relationships. Technology adaption capabilities mediated the relationships of (1) tangibility (β = 0.067, t values = 4.102), (2) reliability (β = 0.60, t values = 4.088), (3) responsiveness (β = 0.202, t values = 7.216, (4) assurance (β = 0.057, t values = 3.539) and empathy (β = 0.068, t values = 3.598), on customer satisfaction. The results indicated that TAN, REL, RES, ASR, and EMP via TAC on the digital platform for online shopping promote customer satisfaction and encourage them to continue online shopping. The details of the result are shown in Table 9 which represents similar findings with [4]. The study's findings reveal a compelling link between the five components of service quality (TAN, REL, RES, ASR, and EMP) and TAC on the digital platform for e-commerce shopping. The results suggest that when e-commerce service providers excel in these dimensions through the effective use of technology, they can significantly boost customer satisfaction levels and promote continued e-commerce shopping.

VI. CONCLUSION

The present study helps shed light on important factors influencing the quality of e-commerce services in China. Using a structural equation model, we determine which variables of SERVQUAL are most important to young customers in China. Overall consumer satisfaction in e-commerce is affected by service quality along critical dimensions such respondents' perceptions of TAN, REL, RES, ASR, and EMP. All of the e-commerce service quality indicators were found to have a positive correlation with customer satisfaction. The first result of this research from Table 8 $\beta = 0.166$, T-value = 4.57, VIF = 1.203, $p < 0.05$). In accordance with this, the T value is 4.572, which suggests the relationship between Tangibility and TAC is statistically significant. The second result $\beta = 0.149$, T-value = 4.722, VIF = 1.151, $p < 0.05$) suggests that The P value confirms the statistical significance of association amid the two variables. This means that the probability of obtaining such a result by chance is very low. The third result of this study $\beta = 0.502$, T-value = 8.366, VIF = 1.291, $p < 0.05$) represents that Responsiveness has a significant positive influence on TAC. The T statistic value is 8.366 which suggest that the rapport between Responsiveness and TAC is highly statistically significant. The fourth result of the current research $\beta = 0.142$, T-value = 3.718, VIF = 1.094, $p < 0.05$) argued that Assurance has a significant positive influence on TAC. The Beta is 0.142 and T statistic value is 3.718, which indicates that there is a positive linear relationship between Assurance and TAC. The fifth result of this study $\beta = 0.169$, T-value = 3.896, VIF = 1.109, $p < 0.05$) demonstrates that Empathy has a significant positive influence on TAC. The Beta value of 0.169 and T value is 3.896indicates that there is a positive linear relationship between Empathy and TAC. Then statistical findings $\beta = 0.402$, T-value = 11.17, VIF = 1.00, $p < 0.05$) suggests that the variable of TAC has a significant and positive influence on customer satisfaction. This is supported by the fact that the Beta value of 0.402 indicates a positive relationship between these two variables, with a T statistic of 11.17 and a P value of 0.000, indicating that this relationship is highly significant. Direct effect and mediating effects results are positively proving the research questions of present study.

Therefore, more effort should be made by service providers to improve e-commerce metrics based on the SERVQUAL model. Therefore, it is incumbent upon the service provider to guarantee the safety and efficiency of their offerings. On the other hand, everyone has an issue with the prices they have to pay. The service supplier, meanwhile, needs to make an effort to get there at a fair price. The majority of users fall between the ages of 21 and 23, and those with lower incomes are the

most likely to take use of these services. As a result, raising the bar on service quality might help boost satisfaction levels.

A. THEORETICAL IMPLICATIONS

This investigation on service quality is comprehensive in scope of the e-commerce organizations in China. The analysis of this study is an empirical investigation to identify the effects of e-commerce attributes that are available in China using measurements of the effect of the quality of e-commerce services as proposed by Rita et al. [66] and the 5 dimensions of the quality E-service model as indicated by Khan et al. [28] on young customer satisfactions. The study also included the mediation of TAC using the SERVQUAL model initiated by Parasuraman et al. [25]. The SERVQUAL model, adopted by this study is most complete models that quantify the service quality that is capable of predicting consumer behavior better than other scales that are regularly utilized. Most importantly, this model is also adapted by prior scholars (for instance, [22], [66]) to evaluate the e-service quality attributes. The results are expected to extend the knowledge about different cities of China and the diverse relevance of e-commerce service quality attributes. The present findings show that all the five components of service quality i.e., TAN, REL, RES, ASR, and EMP adapted from SERVQUAL model has significant influence on the satisfaction of young customer on service quality of e-commerce in the context of China.

This research demonstrated that the SERVQUAL model's conception of e-commerce service quality outperformed other regularly used metrics, like Web-Qual and E-S-Qual, in predicting consumer satisfaction. The SERVQUAL model is more complete in its capture of e-commerce features, and the research supports it as the best model for determining e-service quality in regards to predicting consumer satisfaction. Previous research has used Web-Qual and E-S-QUAL to gauge the quality of e-commerce services [93], [94]. However, this study was the first to incorporate the mediating role of TAC among young consumers into the five-dimensional framework for e-commerce service quality. The hierarchical model of satisfaction, repurchase intent, and word-of-mouth has been the subject of prior research in a variety of international settings [93], [94], [95].

Furthermore, the present research argues that the SERVQUAL model is the core and basic model to examine any categories or context of service quality perhaps; it is even e-commerce. By adopting the most widely used SERVQUAL model for assessing the service quality, This research gives a knowledge of e-commerce service quality across different online businesses, including how nation culture plays a role of adopting e-commerce. By comparing the results of this study with those of a previous study by [93], this work fills a gap in the literature by examining how the five components of SERVQUAL models of ecommerce -service quality is implemented in Chinese cultural settings.

B. MANAGERIAL IMPLICATIONS

The goal of these results was to help managers better understand how the standard of e-commerce service is made. Also, how important each aspect of e-commerce service quality is to making sure customers are happy, which can lead to keeping e-commerce customers. Using the outcomes of this study and the cutting-edge market trends, managers can enhance the service quality of e-commerce companies. For example, customers don't have to worry about the safety of their payment card information when they pay with cash on delivery or a bank transfer.

When making their online shops, management should think prudently about the qualities of good e-commerce service. To give high-quality services, companies should have well-designed websites with enough information, content that looks good, payment options that are easy to use, text that is easy to read, discounts and/or special offers, and a fast-loading speed. Companies must also make sure that customers get their orders on time and that their data is safe and private. In China, customer service was found to be important to the total quality of service. Managers, on the other side, needs to focus more on website layout, data protection, and shipping. Managers can get websites designed by professionals if they choose. Managers should ensure the product is delivered on scheduled dates and in excellent condition because fulfilment has the greatest impact on service quality overall. It might be a noble idea to work with more than one delivery service and let people chooses which one they want. Managers should make deals with delivery services if goods break while being delivered. They should decide who is responsible for the damage so that customer satisfaction isn't undervalued.

Since customer satisfaction is the most important thing for a company's success, productivity, and growth, managers should make it a part of their marketing plan. Most websites for online stores have ways for customers to leave comments. E-WOM (electronic word of mouth) can be made stronger if a company has ''share feedback with friends'' tools. When a customer gets the item they bought, they can leave feedback on the website of the online store. As a form of E-WOM, customers can tell their friends about their experience. Small benefits like discounts on the next purchase are most likely to get young customers to tell their friends about their shopping experience. This can fetch more prospective customers to an enterprise's e-commerce platform. China has a huge user of smartphone, which is a great chance to make mobile online apps store. Online shops might be able to improve the quality of their e-commerce services if they put more money into making mobile access better and put more focus on adding features to mobile apps. Managers could also make websites that work well on phones.

C. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

There are a number of limitations to this study that could be remedied in follow-up investigations. To begin, this research employed a non-probability sampling technique. This study's

TABLE 9. Total variance explained.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.554	23.762	23.762	8.554	23.762	23.762
2	4.259	11.831	35.593			
3	3.204	8.899	44.492			
4	2.728	7.577	52.069			
5	2.410	6.695	58.764			
6	2.016	5.600	64.364			
7	1.333	3.703	68.067			
8	1.086	3.017	71.084			
9	.983	2.731	73.814			
10	.893	2.481	76.295			
11	.720	2.001	78.296			
12	.656	1.821	80.117			
13	.604	1.679	81.796			
14	.571	1.585	83.381			
15	.536	1.488	84.869			
16	.482	1.339	86.208			
17	.474	1.317	87.525			
18	.447	1.242	88.766			
19	.418	1.161	89.928			
20	.407	1.130	91.058			
21	.361	1.003	92.061			
22	.321	.891	92.952			
23	.304	.845	93.798			
24	.285	.791	94.589			
25	.282	.784	95.373			
26	.253	.702	96.075			
27	.236	.656	96.731			
28	.216	.599	97.330			
29	.211	.587	97.916			
30	.190	.527	98.443			
31	.169	.469	98.912			
32	.140	.388	99.300			
33	.134	.372	99.672			
34	.110	.305	99.978			
35	.006	.017	99.995			
36	.002	.005	100.000			

Extraction Method: Principal Component Analysis.

sample was also restricted to Chinese e-commerce users under the age of 35 with a TAC potentially limited applicability of the study's findings. Second, the products sold on the e-platform were irrelevant to the research's examination

of e-commerce service quality. Finally, while this study used cross-sectional data, future research could expand into this area by utilizing longitudinal or panel data. As a last point, the influence of service quality on customers' happiness might be bolstered by variations in demographic factors. Moderating effects of demographic characteristics, culture, and socioeconomic situations on relationship amongst service quality and customer satisfaction is a promising avenue for further study.

APPENDIX

A. QUESTIONNAIRE CONSTRUCTS AND ITEMS

Constructs and items

Tangibility

The online products have appealing color and size

The online products' design looks attractive and modern

The online products have visually appealing materials

The online products have the appropriate size in the Web screen

The online products have a well-structured Web menu

有形性

线上产品具有吸引人的颜色和尺寸

线上产品的设计看起来有吸引力且现代化

线上产品具有视觉吸引力的元素

线上产品在网页屏幕上具有合适的尺寸

线上产品具有结构良好的网络菜单

Reliability

I found that, the online company always delivers what they promise

I think, the online organization products have relevant order confirmation details

I found that, online company products confirm order cancellation returns

The online organization provides order tracking available until delivery

I found that, online company products are accessible all time

可靠性

我发现，在线公司总是能兑现他们的承诺

我认为，在线公司产品有相关订单确认的详细信息

我发现，在线公司产品有订单取消退货的确认信息

线上组织提供订单跟踪，直至交货完成

我发现，在线公司的产品随时都可以访问

Responsiveness

It is easy to get in contact with the online organization, which provides the online services

The online organization is interested in getting feedback

The online organization is prompt in replying to queries

The online corporation responses relevant and accurate emails

The online organization emails content appropriate to requirements

反应能力

很容易与提供在线服务的线上组织取得联系

线上组织有兴趣获得反馈

线上组织及时回复询问

线上组织的回复相关且电子邮件准确

线上组织通过电子邮件发送符合要求的内容

Assurance

I feel secure about the electronic payment system of the online organization

I feel secure when providing private information to the online organization

I would find the online systems secure in conducting the online transactions

The online organization is trustworthy

The online organization is widely known and has good reputation

保证

我对线上组织的电子支付系统感到安全

向线上组织提供私人信息时我感到安全

我发现在线系统在进行在线交易时是安全的

线上组织值得信赖

该线上组织广为人知并拥有良好的声誉

Empathy

I found that, the online organizations have willingness to attend to customers

I am sure that, the online companies always give individual attention to customers

I feel that, the online organizations are always focus on individualize customers' specific need

I feel that, online corporations is concern to customers' friends and family

I found that, online organizations provides the higher level of support to the customers when need arise

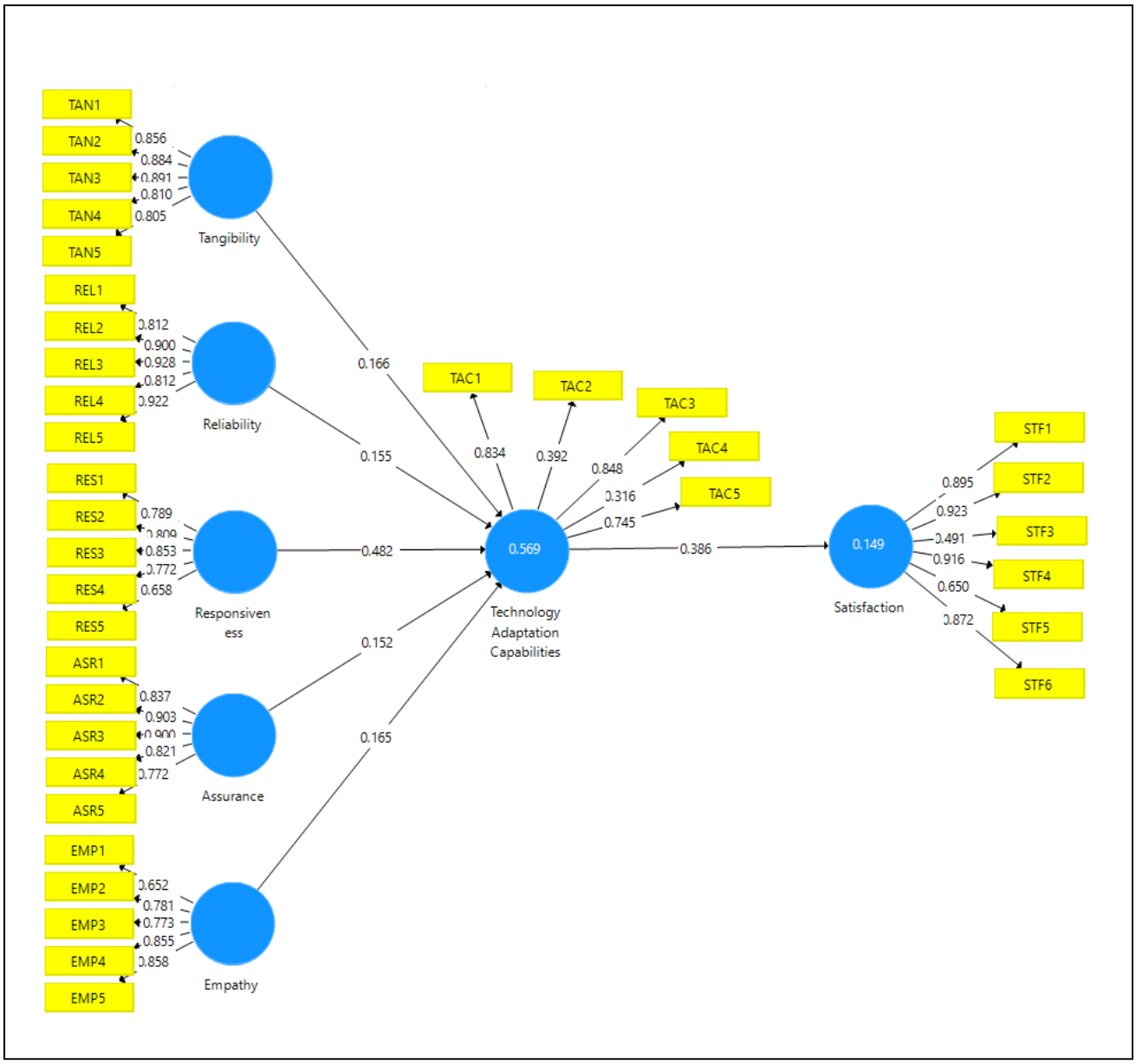

FIGURE 3. Measurement model before conducting confirmatory factor analysis (CFA); source: Smart PLS 3.2.9.

共情

我发现，线上组织愿意关注客户

我确信，线上组织总是对客户给予个性化的关注

我觉得，线上组织总是关注个性化客户的特定需求

我觉得，线上组织很关心客户的朋友和家人

我发现，线上组织在需要时会为客户提供更高水平的支持

Technology Adaptation Capabilities

I have skillfully used the tools and applications the new technology provides

I have quickly become familiar with the new technology

It was easy for me to adjust to the new technology introduced in my organization

I have accurately managed all the facilities the new technology provides

I consider myself a frequent user of my organization's technology

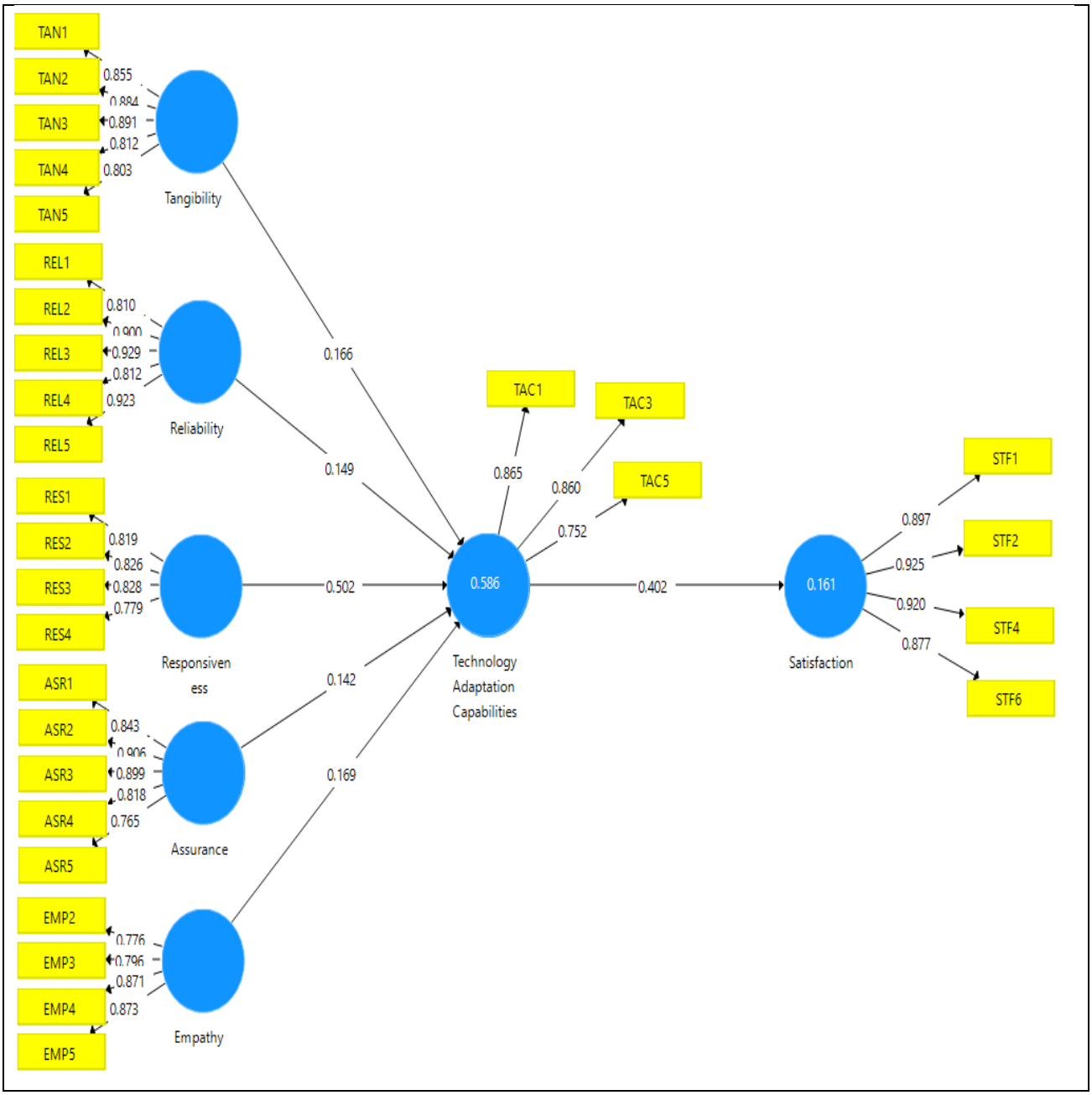

FIGURE 4. Measurement model after conducting confirmatory factor analysis (CFA); Source: Smart PLS 3.2.9.

技术适应能力

我熟练地使用了新技术提供的工具和应用程序

我很快就熟悉了新技术

我很容易适应组织中引入的新技术

我已经准确地管理了新技术提供的所有设施

我认为我自己经常使用我公司的技术

Satisfaction

I am generally pleased with the organization's online services

I am very satisfied with the organization's online services

I am happy with the online organization

The website of the online organization is enjoyable

The online organizations is getting close to the ideal online customers

The online-based companies always meet my needs.
满意
我对该组织的线上服务总体感到满意
我对机构的线上服务非常满意
我对这个线上组织感到满意
这个线上组织的网站是有乐趣的
线上组织正在靠近在线客户的理想状态
网上公司总能满足我的需求

B. COMMON METHOD VARIANCE/BIASNESS TEST
See Table 9.

C. MEASUREMENT MODEL BEFORE CONDUCTING CONFIRMATORY FACTOR ANALYSIS
See Figure 3.

D. MEASUREMENT MODEL AFTER CONDUCTING CONFIRMATORY FACTOR ANALYSIS
See Figure 4.

DATA AVAILABILITY STATEMENT
Data will be provided upon request.

CONFLICT OF INTEREST
Authors are declaring that there is no potential conflict of interest.

FUNDING INFORMATION
This study was supported by the own fund of the authors.

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