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Website interactivity and brand development of online travel agencies in China: The moderating role of age

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ABSTRACT

The purpose of this study was to propose a theory-driven model to understand the relationship among social website interactivity, brand experience, brand choice, price premium, and buying intention within the context of online travel agencies (OTAs) websites. The moderating role of consumer age was also investigated. Results suggested the inclusion of social website interactivity in the design of OTA websites enhanced branding elements, which influenced customers' willingness to pay the price premium and to return in the future. The strength of the relationships among these constructs varies across young consumers (aged between 18 and 25) and older consumers (aged above 25). Moreover, results suggested that social website interactivity influenced price premium and buying intentions through brand experience and brand choice. This study offers specific theoretical and practical implications.

1. Introduction

Social website interactivity (SWI) in website design has been recognized as an important feature for building a brand (Voorveld, van Noort, & Duijn, 2013). Social interactivity refers to the act a user performs when navigating a website. SWI, a subsection of website interactivity, pertains to the interaction between websites and consumers, which is believed to impact consumers' behavioral intentions (Aluri, Slevitch, & Larzelere, 2015). In this sense, SWI serves as a fundamental competency that contributes to the development of strong relationships with consumers via the reciprocal communication between systems and users (Barreda, Bilgihan, Nusair, & Okumus, 2016). SWI has been shown to induce positive attitudes toward branded websites through the elaboration of product-related information (Palla, Tsiotsou, & Zotos, 2013).

Although a growing body of research has been concerned with website interactivity and its potential effect on developing online branding (Wang, Hsu, Huang, & Chen, 2015), there remains limited research on how SWI influences both brand building and behaviors. Due to the pervasive usage of internet, the quality of a brand's online presence has become a critical factor for brand communication and customer relationship management. Research has suggested that brand choice, brand experience, and price premium influences customers' behavioral intentions (Morgan-Thomas & Veloutsou, 2013). Hence, the prospective impact of website interactivity on customers' behavioral intentions may not fully materialize unless website users enjoy memorable customer experiences. In this sense, there remains a need to examine how interactivity affects buying intentions when mediated by brand experience, brand choice, and price premium.

SWI has been commonly recognized as a critical antecedent of customer perceptions and behaviors, although the presence of moderating variables can influence its impact (Ku & Chen, 2015). Previous research has suggested that moderators like age, digital status, and product type should be considered (Voorveld et al., 2013). In addition, Chung, Park, Wang, Fulk, and McLaughlin (2010) suggested that age had a significant impact on internet users' perceptions and behaviors. Nevertheless, there remains a scarcity of research on the effect of age (Radzliyana, Khor, Azlan, & Lim, 2015), and it remains unknown how different age consumers might respond differently to initiatives for online branding.

Southworth and Kim (2015) suggested that a consumer's age could influence a brand's perception and associated behavioral intentions over time. Previous research has suggested that age may affect both branding and behavior (Ilicic, Baxter, & Kulczynski, 2016). For instance, young Chinese consumers were found to be brand conscious, exhibiting a strong need for a brand's uniqueness (Chan & Wang, 2015).

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Therefore, the role of age in branding should be illuminated. To our knowledge, no previous research has examined the moderating effects of age on the relationship between SWI, branding perceptions, and behavioral intentions. This study fills this gap in previous research by examining whether age moderates the relationships between SWI and brand experience, brand choice and price premium, brand experience and buying intention, and brand choice and buying intention.

The online travel agencies (OTA) in China have been selected as the research context for this study. According to the United Nations World Tourism Organization, China remains the top-ranked outbound tourism market since 2012 with outbound tourism reaching 109 million in 2014 (Xinhua Net, 2015). In this regard, purchasing tourism products online has gained popularity among Chinese consumers. Moreover, recent years have witnessed a remarkable development of local OTAs with an annual growth rate over 30% from 2012 onwards (iResearch, 2015). In 2015, the revenues in China pertaining to OTA's third quarter increased by 48.8%, up from the 5.96 billion Yuan recorded during the same period of the previous year (iResearch, 2015). Some popular Chinese OTAs including Ctrip, Qunar, and Tuniu, have been listed on the NASDAQ. Despite tourism growth, Chinese websites have been falling behind competing websites in terms of their interacting aspects, which has a negative effect on maintaining a positive customer relationship (Ye, Fu, & Law, 2016). Hence, to enhance the competitive market advantage of Chinese OTAs, it is important for OTA managers to understand the impact of SWI on brand elements that have the potential to influence the behavioral intentions of consumers.

2. Literature review and hypotheses development

The theoretical framework is presented in Fig. 1, and the following sections discuss and support each of the proposed relationships through a series of hypotheses.

2.1. Social website interactivity (SWI)

SWI represents the reciprocal communication that occurs between individuals and technology. The perception of social interactivity is the interaction between the users and the system or website (e.g., e-mail, chat, or toll-free telephone access). McMillan and Hwang (2002) suggested that SWI exists when users possess the capability to communicate with internet tools, including real-time chats, bulletin boards, and search engines, among others. Such internet tools can help to evoke a favorable user experience (Huang & Hsiao, 2012).

Previously, branded websites were examined from a design standpoint to explain how reciprocal interactivity assists marketers in successful online branding. Voorveld et al. (2013) suggested that website interactivity positively influenced brand relationship quality and brand image. To advance prior research, the brand experience was introduced later as a consequence of interactivity. Van Noort, Voorveld, and Reijmersdal (2012) demonstrated that interactivity facilitates online flow and produce a more intensive online experience. Similarly, Yoon and Youn (2016) claimed that website interactivity enhanced the online brand experience.

Social website interactivity presents opportunities to communicate in real time while offering consumers the ability to select the desired content and parties involved for communication (Voorveld et al., 2013). When consumers perceive they have some degree of control during the communication process, they tend to be more likely to believe their connection with the brand is exclusive. Mollen and Wilson (2010) suggested that consumer's experiences could be enhanced through real time communication. Therefore, a unique consumer experience is likely to be achieved through reciprocal communication (Nepomuceno, Laroche, & Richard, 2014).

In line with previous research, OTA websites that incorporate features of SWI into their design appears likely to enhance online branding. Interactivity can enhance a company's telepresence, which in turn affects customer engagement (e.g., active cognitive processing, instrumental, and experiential value; Mollen & Wilson, 2010). Interactivity appears likely to help customers obtain more value (e.g., instrumental and experiential value) from websites and a unique brand experience. Based on the findings of previous research, we predicted that if SWI becomes an attribute in a technology-mediated communication (TMC) context that influences customers to have a positive brand experience, then customers would show positive behavioral intentions when making a choice. In contrast, customers may also resist choosing a brand if they encounter negative experiences when visiting a website. It is expected that SWI may enhance users' brand experience and cultivate their brand preference with an OTA branded website. Therefore, the first two hypotheses posited that:

H1. There is a significant positive causal relationship between SWI of an OTA website and brand experience.

H2. There is a significant positive causal relationship between SWI of an OTA website and brand choice.

2.2. Online brand experience, brand choice, and price premium

Online brand experience describes how users relate to brands in a holistic manner (Morgan-Thomas & Veloutsou, 2013). It can be attained through interaction with a website (Hamzah, Alwi, & Othman, 2014). Brand experience refers to the feelings and emotions of the consumer after interacting with the brand (Kuo & Feng, 2013). It has been argued that customer experiences are cognitive, social, affective, and physical in nature (Verhoef et al., 2009). For this study, we regarded online brand experience as a complex dynamic of consumer's perceptions and behaviors, which included a consumer's favorable perception of the visual display, the participation in the OTA's community, the perceived attractiveness of cookies, and the value received from offering reasonable prices (Ha & Perks, 2005).

Along with brand experience (Morgan-Thomas & Veloutsou, 2013), brand choice (Raju & Asifulla, 2013) represents another key determinant of a consumer's behavioral intentions. Brand choice has been

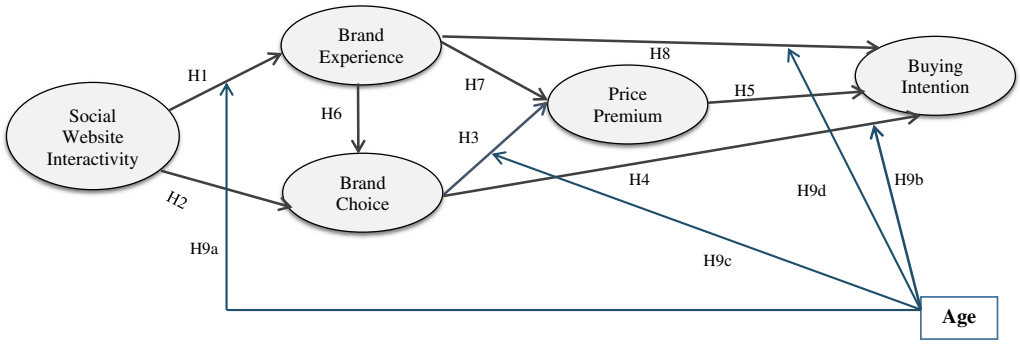

Fig. 1. Hypothesized path analysis model. Age includes older customers (age above 25) and younger customers (aged 18–25).

defined as the selection of a specific brand over competing brands (Raju & Asifulla, 2013). Often consumers are likely to pay a price premium for their favorite brands. The willingness to pay a price premium refers to the amount a consumer is willing to pay for a brand as compared with competing brands, which offer similar benefits (Buil, Martínez, & de Chernatony, 2013). For this study, the price premium was defined as the monetary amount above the average price that consumers are willing to pay for a certain travel service or product. It is likely that consumers who have positive brand experiences are more likely to pay a price premium. Such favorability enhances their perception of the brand's value, which leads to their willingness to pay a price premium, and their brand preference triggers their buying intention (Buil et al., 2013).Therefore, the hypotheses three through five posited that:

H3. There is a significant positive causal relationship between brand choice of an OTA website and price premiums.

H4. There is a significant positive causal relationship between brand choice of an OTA website and buying intention.

H5. There is a significant positive causal relationship between price premium of an OTA website and buying intentions.

In an era of e-marketing, a customer's online brand experience has been shown to have a stronger influence on behaviors and consumer decisions than just price (Bilgihan, Kandampully, & Zhang, 2016). As stated by Nepomuceno et al. (2014), a favorable experience includes the perceived risks when buying online and the likelihood of returning to a website. The main purpose of creating a positive experience for consumers has been to establish an emotional connection between users and brands to stimulate consumers to select their preferred brand. Nysveen, Pedersen, and Skard (2013) examined how brand experience impacts a customer's repetitive behavior. In this study, SWI offers consumers signals that the company is listening to their voice and that they are valued. Therefore, a customer's positive cognitive and affective states when surfing online is very likely to elicit a favorable brand experience. In turn, a 'Halo Effect' is expected to occur, which implies that consumers are prone to evaluate different aspects of the brand positively based on an initial positive perception. Such positive cognitions elicited by a brand may result in a consumer's behavioral response. As online experience increases, their satisfaction with the brand and behavioral intentions can be enhanced (Yoon & Youn, 2016). In this study, we expected that consumers with favorable online brand experiences would tend to reconsider the brand as their preferred choice, and, in turn, they would be willing to pay a price premium. Therefore, hypotheses six through eight posited that:

H6. There is a significant positive causal relationship between brand experience of an OTA website and the brand choice.

H7. There is a significant positive causal relationship between brand experience of an OTA website and price premium.

H8. There is a significant positive causal relationship between the brand experience of an OTA website and buying intention.

2.3. Age as a moderator

The impact of SWI is not always positive (Palla et al., 2013). For instance, age has been shown to influence consumer readiness to perceive online experiences and make favorable choices (Mosteller, Donthu, & Eroglu, 2014). Moreover, age has been found to influence the ability of consumers to evaluate interactions, which helps to motivate their behavior (Zanjani, Milne, & Miller, 2015). For example, Chung et al. (2010) found that age was negatively correlated with an online user's internet self-efficacy, perceived quality of the online community, perceived usefulness, and behavioral intention overall.

Previous research has suggested that age is a critical demographic variable that moderates the relationships between consumers' perceptions of technology (e.g., perceived ease of use and perceived usefulness etc.) and their behavioral intentions (Tarhini, Hone, & Liu, 2014). Although previous research has not shown clear results regarding the moderating effect of age between website interactivity, branding, and consumer behaviors, some research has suggested the importance of including age as a moderator (Kirk, Chiagouris, & Gopalakrishna, 2012).However, the role of age in the relationships among interactivity, branding, and behavioral intentions has not been extensively studied. This study proposed age moderates the impact of SWI on brand development and behavioral intentions. We assume that younger consumers prefer to interact with technology more than older (Bolton et al., 2013).

Branding elements are likely to influence intentions toward a brand of preference (King, 2017). However, this impact may also vary based on the age of a consumer. That is, consumers may differ in their response to brand experience and brand choice, leading to different levels of willingness to pay high prices and intention to buy. In specific cases, some consumers who have had a positive brand experience may be willing to pay price premiums and continue to buy the brand in the future. Others, however, who find a website brand experience too novel may be reluctant to pay a premium price, which will decrease their buying intention (Parment, 2013). Specifically, the current study focused on the post 90s generation in China, which represents a market segment that attracts great attention. The 90s generation was born between 1990 and 1999 (aged around 18–25). Thanks to the rapid growth and spread of the internet in China since early 2000, the post 90s generation grew up with the internet and, thus, is likely to have had more experiences using various online websites.

The post 90s generation in China tends to prefer brands that reflect their personality, values, and aspirations (Nielsen, 2015). They are more brand conscious, because of their need for uniqueness and peer influence (Chan & Wang, 2015) and their assessment of brand self-congruity is likely to have an indirect influence on their brand loyalty (Lu & Xu, 2015). Hence, when this group of consumers considers a brand as the best choice, it is reasonable that they will have higher buying intentions and will be more likely to pay a premium price. Assuming that they have much experience with online shopping, they may expect more from the brand to enrich their brand experience (e.g., online and offline brand community activities). The relationship between website interactivity and brand experience may not be as strong for this group as compared with their elder counterparts because it takes time for consumers to fully experience a brand and establish emotional and/or behavioral attachment to it. Thus, we expect that the relationship between brand experience and buying intention is stronger for the elder aged consumer. Those consumers may have more interactions with the focal brand, and their cumulative positive brand experience is expected to have a more pronounced effect on their behavioral intentions. Therefore, hypothesis nine posited that:

H9a. The effect of SWI on brand experience of an OTA website will be moderated by age, with older consumers (age above 25) expecting higher online brand experience from interactivity than younger consumers (aged 18–25).

H9b. The effect of brand choice on buying intention of an OTA website will be moderated by age, with younger consumers (aged 18–25) expecting higher intention to buy from brand selection than older consumers (age above 25).

H9c. The effect of brand choice on price premium of an OTA website will be moderated by age, with younger consumers (aged 18–25) expecting higher willingness to pay for brand selection than older consumers (age above 25).

H9d. The effect of brand experience on buying intentions of an OTA website will be moderated by age, with older consumers (age above 25) expecting higher intentions to buy than younger consumers (aged

18–25).

The notion of the hypothesized relationship with consideration for age is illustrated in Fig. 1.

3. Methodology

3.1. Measures and pilot testing

A seven-point Likert scale adapted from previous research was used, with “strongly disagree” and “strongly agree” anchoring the scale. The measures included social website interactivity (two-way communication; Jiang, Chan, Tan, & Chua, 2010), brand experience (Ha & Perks, 2005), brand choice (Hsu, Haemoon, & Assaf, 2012), price premium (Netemeyer et al., 2004) and buying intention (Erdem, Swait, & Valenzuela, 2006). Slight modifications to question wording were made to fit the online travel agent context. Two tourism scholars proficient in the necessary language applied a back-to-back translation. Moreover, a pilot test was conducted with domestic, Chinese tourists, allowing for minor modifications to the instrument.

3.2. Sampling and data collection

The main survey was conducted both online and offline. Several university-trained students administrated a street intercept survey in the central business district of a metropolitan area in southern China. Data collection was based on a convenience sampling method. To reduce selection bias, every fifth person who exited their office building was asked to complete a questionnaire. 230 respondents completed an in-person questionnaire with a 45% response rate. And 201 respondents completed the questionnaire on an online survey website. The total sample consisted of 431 respondents. In all cases, the anonymity of respondents was strictly enforced. Harmon's one-factor test indicated that common method variance was not a concern for the study. The online and offline samples did not have a significant difference in their mean values for the variables under study, although there were more young consumers in the online samples.

4. Study results

Table 1 illustrates that male respondents represented 48.3% and female respondents represented 51.7% of the total sample. Approximately 40% of the respondents were between the ages of 26 to 35 years old and 43.3% were 25 years old or younger. Slightly more than half of the respondents had a personal annual income level below 100,000 Yuan. At the time of this study, one US dollar equals 6.52 Yuan. In addition, the sample was comparable to the demographic characteristics of the China Internet Network Information Centre.

Table 1
Descriptive statistics for demographics by gender, age, marital and education (N = 431).

Demographic variables	Attributes	Frequency (N)	Percentage (%)
Gender	Male	208	48.3
	Female	223	51.7
Age	18–25 years	187	43.3
	26–35 years	169	39.2
	36–45 years	57	13.3
	46–55 years	11	2.6
	56–65 years	7	1.6
Education level	High school and below	29	6.7
	Associate degree	84	19.5
	Bachelor's degree	239	55.5
	Master's degree	59	13.7
	Doctoral degree	13	3.0
	Other	7	1.6
Marital status	Married	142	33.0
	Separated	6	1.4
	Divorced	4	0.9
	Widowed	1	0.2
	Single	274	63.6
	Prefer not to answer	4	0.9

Table 2
Descriptive statistics for demographics by gender, age, marital and education (N = 431).

Variables	Attributes	Frequency (N)	Percentage (%)
Personal annual income	50,000 Yuan or below	71	16.4
	50,001–100,000 Yuan	152	35.3
	100,001–150,000 Yuan	79	18.3
	150,001–200,000 Yuan	47	10.9
	200,001–250,000 Yuan	18	4.2
	250,001–300,000 Yuan	27	6.3
	Above 300,000 Yuan	37	8.6
Occupation	Management, professional, and related occupations	100	23.2
	Service occupations	29	6.7
	Sales	25	5.8
	Office occupations	59	13.7
	Farming, fishing and forestry	0	0
	Construction, extraction, and maintenance occupation	16	3.7
	Production, transportation, and material moving occupations	4	0.9
	Government occupations	10	2.3
	Technology occupations	7	1.6
	Student	137	31.8
	Retired	5	1.2
	Unemployed	3	0.7
	Others	36	8.4

Note. 1 US Dollar = 6.52 Yuan.

4.1. The measurement model

A confirmatory factor analysis (CFA) was first conducted to examine the reliability of the measurement model before conducting the path analysis. Data were analyzed using the statistical software SPSS 20 and AMOS18. The reliability, convergent validity, and discriminant validity of all scales were satisfactory. As shown in Table 2, the Cronbach's alpha coefficients ranged from 0.846 to 0.897 and were greater than the minimally accepted level of 0.70. The results indicated that convergent validity was established (Table 3). All factor loadings were significant, ranging from 0.583 to 0.995. And, the composite reliability of all constructs was well above the threshold value of 0.50 (Garbarino & Johnson, 1999). Discriminant validity was validated as the average variance extracted for each construct greater than the squared multiple correlations among each pair of constructs. The measurement model also demonstrated satisfactory fit indices, χ^2 = 2.86, CFI = 0.95, TLI = 0.94, GFI = 0.91, RMSEA = 0.07. The fit indices suggested the measurement model had an acceptable degree of fit (Hooper, Coughlan, & Mullen, 2008).

The overall structural model fit was assessed. The overall fit indices for the suggested model were satisfactory, χ^2 = 2.83, CFI = 0.95, TLI = 0.94, GFI = 0.91, and RMSEA = 0.07 (see Fig. 2). The model was evaluated using the maximum likelihood method. Results related to H1, which stated that social website interactivity was positively associated with brand experience, was statistically significant, β = 0.527, $p < 0.01$. Results related to H2, which stated that perception of social website interactivity was positively related to brand choice, was statistically significant, β = 0.33, $p < 0.01$. Results related to H6, which stated that brand experience was positively related to brand choice, was statistically significant, β = 0.333, $p < 0.01$. In the same vein, H7, which stated that brand experience was positively associated with the price premium, was statistically significant, β = 0.181, $p < 0.01$. The results suggested that brand experience had a positive effect on buying intention, β = 0.12, $p < 0.01$, supporting H8. The relationship

Table 3
Reliability and validity analysis of statement categories.

Statement categories	Factor loading	Composite reliability	Average variance extracted	Cronbach's alpha
Social interactivity		0.894	0.628	0.897
This online travel agent website is effective in gathering visitor's feedback.	0.716			
This online travel agent website makes me feel like the company wants to listen to the website visitors.	0.816			
This online travel agent website encourages visitors to offer feedback.	0.844			
This online travel agent website gives visitors the opportunity to talk back.	0.803			
This online travel agent website facilitates two-way communication between the visitors and the site.	0.777			
Brand experience		0.849	0.533	0.855
I often like to participate in the community of this online travel agent.	0.67			
I participate in a special event offered on this website.	0.77			
The variety of visual displays in this website is interesting.	0.805			
Cookies that are supplied in this website usually fascinate me.	0.798			
This website offers reasonable prices.	0.583			
Price premium		0.961	0.893	0.846
The price of online travel agent brand X would have to go up quite a bit before I would not consider buying it.	0.995			
I am willing to pay a higher price for a room in online travel agent X than for other online travel agent brands.	0.933			
I am willing to pay a lot more for a room in online travel agent X than for other online travel agent brands.	0.904			
Buying intention		0.906	0.762	0.885
I would book a room in online travel agent brand X.	0.868			
I would seriously consider booking a room in online travel agent brand X.	0.859			
It is very likely that I would book a room in online travel agent brand X.	0.891			
Brand choice		0.88	0.71	0.894
Even if other competing brands are not different from X in any way, it seems smarter to choose an X online travel agent.	0.825			
An X online travel agent is always a superior choice to its rival online travel agents.	0.876			
An X online travel agent is always a superior choice to its rival online travel agents.	0.876			

between brand choice and price premium was significant, $\beta = 0.57$, $p < 0.01$, supporting H3. H4 proposed that there was a positive relationship between brand choice and buying intention, which was supported, $\beta = 0.668$, $p < 0.01$. Surprisingly, the relationship between price premium and buying intention was not significant, $\beta = -0.006$, rejecting H5.

In relation to the moderating role of age, the hypothesized relationships were supported. The sample was split into two sub-samples, a younger group aged 25 and below (older than 18; $N = 187$) and an elder group who were aged 26 and above ($n = 244$). The measurement invariance test indicated that full metric invariance was met. Loadings for all items were constrained to test full metric invariance (Steenkamp & Baumgartner, 1997). Compared to the unconstrained model, the fit of the constrained model did not change significantly: $\Delta\chi^2 = 19.44$, $\Delta df = 13$, $p > 0.05$. Hence, full metric invariance was supported. The hypothesized path analysis model was constrained to be equal each time, and the model fits were compared. Results indicated that, when the social website interactivity and brand experience link were equally constrained, the difference in model fit was significant ($\beta_{young} = 0.396^{**}$, $\beta_{elder} = 0.653^{**}$; $\Delta\chi^2 = 5.55$, $\Delta df = 1$, $p < 0.05$, supporting H9a). Similarly, when the brand choice and buying intention link was constrained to be equal, the model fit changed significantly compared to the baseline model, $\beta_{young} = 0.873^{**}$, $\beta_{elder} = 0.509^{**}$; $\Delta\chi^2 = 9.84$, $\Delta df = 1$, $p < 0.01$, supporting H9b.When the brand choice and price premium link was constrained to be equal, the model fit changed significantly, $\beta_{young} = 0.585^{**}$, $\beta_{elder} = 0.529^{**}$; $\Delta\chi^2 = 6.18$, $\Delta df = 1$, $p < 0.05$, supporting H9c. Similarly, when the brand experience and buying intention link was constrained to be equal, significant change was found in the model fit, $\beta_{young} = -0.12$, not significant; $\beta_{elder} = 0.336^{**}$; $\Delta\chi^2 = 16.76$, $\Delta df = 1$, $p < 0.01$, supporting H9d (see Table 4).

5. Discussion and conclusions

This study examined the structural relationship among different constructs based on a sample of OTA customers from China. Social

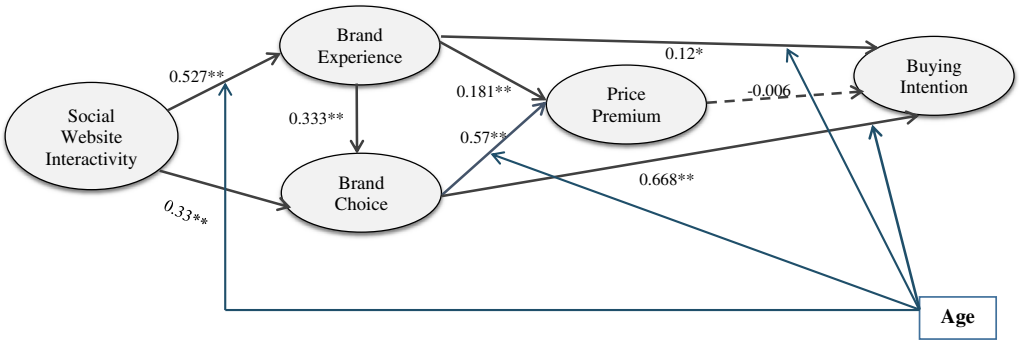

Fig. 2. Results for the structural relationships in the proposed path analysis model. Dotting line denotes insignificant relationship. Solid lines denote significant relationships. $^{**}p < 0.01$; $^{*}p < 0.05$.

Table 4
Correlation coefficients of constructs.

Constructs	Social interactivity	Price premium	Brand choice	Buying intention	Brand experience
Social interactivity	–				
Price premium	0.364	–			
Brand choice	0.504	0.661	–		
Buying intention	0.426	0.492	0.725	–	
Brand experience	0.527	0.469	0.507	0.454	–

Table 5
Tests for measurement invariance and moderations.

Models	NFI	IFI	TLI	CFI
Unconstrained model	0.898	0.942	0.928	0.941
Full metric invariance model	0.894	0.940	0.929	0.940
Constrained model 1: BC–BI	0.896	0.940	0.926	0.940
Constrained model 2: SWI–BE	0.897	0.941	0.927	0.940
Constrained model 3: BC–PP	0.897	0.941	0.927	0.940
Constrained model 4: BE–BI	0.895	0.939	0.924	0.938

Note. BC = Brand choice; BI = Buying intention; SWI = Social website interactivity; BE = Brand experience; PP = Price premium.

website interactivity exerted its influence on buying intention indirectly through brand experience and brand choice, and brand experience influenced both brand choice and willingness to pay a price premium. In addition, the strengths of the structural relationships differed according to different age groups (Table 5).

Results revealed that social interactivity of websites had a positive effect on the brand experience and brand choice. This finding has been supported by Yoo, Lee, and Park's (2010) assertion that website interactivity is crucial for a brand's success. The two-way communication lets customers perceive that the brand accommodates their needs as consumers, resulting in a memorable experience. As previous research has suggested, interactivity establishes a strong bond among consumers and the brand (Madhavaram, Badrinarayanan, & McDonald, 2005).

Previous research has suggested that website interactivity can enhance customer experience, which in turn generates positive cognitive and behavioral outcomes, such as brand equity and purchase intention (e.g., Bilgihan, Okumus, Nusair, & Bujisic, 2014; So & King, 2010). Ye et al. (2016) suggested websites in China should improve their customer relationship by enhancing their responsiveness to customers. Our research reaffirms the importance of interacting and building a strong bond with customers. In addition, our results revealed that customers establish preferences toward the brand when they experience website interactivity. Brand experience was found to influence buying intentions directly and indirectly through brand choice. The relationship between willingness to pay a price premium and buying intention was not significant. That is, for Chinese consumers of online travel products, willingness to pay more does not necessarily translate into buying intention. This novel finding may be attributed to the context of the study, which deserves further investigation. In China, OTAs have been fiercely competing against each other by offering high discounts or cash rebates to compete for more market share (South China Morning Post, 2012). Therefore, Chinese OTA customers may become more price-sensitive. Despite some Chinese customers' unwillingness to pay a higher price premium, they may still show high buying intention because they are expecting more incentives and/or discounts from the OTA brands (buying intention: $M = 5.01$, SD = 0.95). This phenomenon may be a unique feature of the Chinese market, and further research is needed to uncover the underlying factors related to this finding.

Interestingly, the moderating effect of age has been found to be significant. The post 90s generation was found to have high brand consciousness, which clarifies the relationship between brand choice and buying intention and between brand choice and willingness to pay a price premium. Once this group of consumers identified with the brand and considered it their best choice, they were more willing to pay a higher price and make a purchase decision. It is interesting to find that the effect of SWI on brand experience is much weaker for the younger consumer group. One reason may be that young consumers who grew up with internet may expect more from a brand (e.g., fun and novelty seeking) to enhance their brand experience, rather than just using a website for its interactivity. Another explanation is that the older group could be considered more mature consumers who may attach more importance to how the brand treats and interacts with them during their experience. Hence, SWI was considered an important factor that contributed to brand experience, which in turn affected buying intentions.

5.1. Theoretical implications

This study contributes to the literature in several ways. First, this was one of the first studies to examine the moderating role of age among SWI, branding elements, and behavioral intentions. Despite substantial scholarly efforts, there is still not enough research in this area. The moderating role of age in the current research context sheds light on the characteristics and preferences of different generations of online Chinese consumers. Our study examined the role of age, which has been largely ignored by prior studies investigating the relationship among SWI, brand experience, brand choice, price premium, and buying intention. These novel findings may serve as a foundation for future research. The research findings help scholars better understand the relationship among branding elements for different market segments. It will be interesting to investigate the underlying reasons for such generational differences and to identify website elements that are more prone to enhance brand experience and buying intention.

Second, the current study advances our understanding of the relationship between OTA websites features and their branding elements in an emerging economy. Prior studies on OTAs mainly focus on their relationship with hotels (Zhang, Guillet, & Kucukusta, 2015) and their relationship with the online community (Mytrinh, Donjyhfu, & Lin, 2015). However, only limited research has investigated the technical performance and impact of OTAs. Ye et al. (2016) used impact-range performance and asymmetry analyses to evaluate OTA website performance in China and found the impact of different attributes on overall customer satisfaction. Our study contributes to this line of research by further illuminating how OTA websites' functional features influence OTA branding elements. Future research should examine different features of OTA websites (e.g., playfulness) and their impact on branding.

This study contributes to the growing body of knowledge on website interactivity, branding elements, and behavioral intentions in several ways by testing the moderating effect of age in three main factors proposed in the model: interactivity, perceptions, and behaviors. The moderating role of age on a theoretical model incorporating interactivity, branding, and behaviors have not been tested, and such findings may pave the way for future research.

5.2. Practical implications

This study offers several practical implications. First, OTA websites should allocate more resources to enhance their SWI. Two-way communication on the OTA websites could encourage customers to offer feedback. OTA websites should also respond to customer inquiries in a timelier manner. This suggestion is vitally important in the fiercely competitive industry of online travel. The ways that OTAs interact with customers are important, especially because young consumers may prefer individualized and creative interactions rather than rigid and standardized ones. This claim was supported by the differences in the mean value of two items of social interactivity: “This online travel agent

website makes me feel like the company wants to listen to the website visitors", $M_{young} = 4.64$; $M_{elder} = 4.82$, $p < 0.05$, and "This online travel agent website encourages visitors to offer feedback", $M_{young} = 4.69$; $M_{elder} = 4.93$, $p < 0.05$. Hence, OTAs should try to seek effective ways to engage and respond to younger customers.

Second, more effective marketing efforts should target younger generations who will become the major customer source in the future. Prior research indicated that the post 90s generation in China are more individualistic, more open to innovative ideas, and prefer personalized products and services (Nielsen, 2015). Marketing efforts should be focused toward this direction. OTAs should try to design their products and/or services as well as their websites in ways that align with the values of this younger generation. If consumers believe that a brand represents their values, they are more likely to identify with that brand. As suggested by the results of this study, consumers who identify with one brand over other brands are more likely to make a buying decision and pay a price premium. Marketers should work toward cultivating the brand preference of this group of customers as early as possible, which may lead to a higher profit margin for a company's future earnings.

Third, practitioners should try to enhance the brand experience, because it contributes to behavioral intentions. For example, practitioners may consider organizing online and offline events with an aim to build up and sustain an active brand community. For example, Xiaomi, which is a famous Chinese Smartphone company, organized a variety of online and offline activities to nurture customer loyalty (e.g., annual fan meetings, trial experiences of new products, featured events or shows around China, and online forums, etc.). OTAs can emulate some of the best practices from other industries. In addition, a visual display on websites should be fascinating and attractive (Skulmowski et al., 2016). These measures may generate a favorable behavioral response for the age group over 25 years old, as brand experience positively relates to buying intention.

5.3. Limitations and future research

Although our study made several theoretical and practical contributions to previous research and practice, there are several limitations that should be acknowledged. First, the study was cross-sectional in design, and the causality in the structural model needs to be interpreted with caution. Future research may measure different constructs at different time points. Second, the samples were confined to Chinese consumers. Hence, the results may not be generalizable to consumers from other cultural backgrounds. Future research should test the research model proposed in this study in different cultural contexts. Third, only SWI was considered in this study. Future research should investigate other functional features of websites, which may influence consumer brand experience. Fourth, this study considered age as a moderator, and future research may explore other possible moderating variables (e.g., education and income).

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