Understanding millennial perceptions of human and nonhuman brands

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Abstract

Purpose – The purpose of this paper is to obtain perceptions from three distinct millennial segments about human and nonhuman brands related to travel. Specifically, inter and intra relationships between human and nonhuman brand credibility and equity constructs were investigated.

Design/methodology/approach – Three millennial generational segments representing 571 respondents familiar with human and nonhuman brands, were investigated to explore their human and nonhuman brand credibility and equity perceptual issues. Structural equation modeling was employed to test the study hypotheses. Multi-group analysis was used to observe group differences.

Findings – Selected millennial segments were found to have differences in their behavior pertaining to human and nonhuman brand constructs. All hypotheses of the overall model were accepted. For group differences, a significant difference was observed. Gen Z was found to be different in emulating humans and their linked nonhuman brands when compared to both younger and older Gen Y segments.

Research limitations/implications – Study findings contribute to the marketing and tourism branding literature, as do findings related to generational differences.

Practical implications – The authors suggested implications for hospitality and tourism marketing professionals under the headings of emotional attachment, entertaining content, use of social media and exploring brands online. Implications including multicultural, brands with strong values and engaging with brands can be helpful for hospitality managers in attracting millennials.

Social implications – Social implications suggest behavioral differences related to three sub-groups of generational cohorts involving millennials.

Originality/value – This is the first study dedicated to observing millennial perceptions for human and nonhuman brands.

Keywords Millennials, Credibility, Equity, Human brand, Nonhuman brand

Paper type Research paper

Introduction

A specific name, sign, symbol or logo of any product is known as a brand. Hotels and restaurants are products, while brands are represented by Hilton, Marriott, Westin, Outback, Capital Grille and The Cheesecake Factory. Media houses/Channels are news products, while CNN, The Travel Channel and ESPN are some popular news channel brands. The main purpose of branding is to allow products to stand out from their competitors by adding credibility, meaning and value. The branding literature has transformed into various shapes, which

includes corporate brands (Scheidt *et al.*, 2018; Ng *et al.*, 2014; Spry *et al.*, 2011) and human brands (Kim and McGill, 2011; Aggarwal and McGill, 2012). However, very few studies have addressed humans as brands (Thomson, 2006; Close *et al.*, 2011). Marriott Hotels, a nonhuman brand is linked with many human brands such as its employees, guests and Stakeholders. Thomson (2006) defined a human brand as any individual whose name, image or audience can be utilized to promote any brand. In light of this definition, guests (through positive word of mouth about their experiences), employees (by extending hospitality to guests) and celebrities (through endorsing and promoting the hotel brand), all serve as human brand examples.

Research studies have documented the savvy behavior of millennials for brands (Moriarty, 2004; Nowak *et al.*, 2006). Millennials, considered as more status conscious, technologically updated and trend-setting when compared with other generations (Gong and Li, 2008), now represent the largest segment of the US population (82 million), whom can be described as individuals in their late thirties or younger (McCormick, 2016; Bilighan, 2016). This generation is able to be segmented into three sub-groups. The first sub-group, known as Gen Z, is the cohort representing individuals in their early twenties or younger, who was born between 1996 and 2012. The second sub-group is the younger segment of the Gen Y millennials that range in age from 23 to 30 years old, who were born between 1988 and 1995. The third sub-group represents the older Gen Y millennial cohort, represented by individuals 31 to 39 years of age, born between 1978 and 1987. Although all three groups are defined as millennials, each of these generational cohorts possesses different preferences and values as consumers of goods and services (Parment, 2011, 2013; Bilighan, 2016).

This study aims to explore the behavioral differences among these three millennial cohorts with respect to human brands within the hospitality and tourism context. Brand research has revealed millennials are more concerned about the environmental, social and quality issues related to brands than are other generations (e.g. Neuborne, 1999). This suggests that if millennials found brands compromised on any of these issues, they may boycott those brands (Neuborne, 1999). This behavior shows intensive interest of millennials in brand observance as a behavioral characteristic associated with millennial generational cohorts.

Outstanding sports performers and credible movie stars are primarily chosen to promote nonhuman brands. In the hotel setting, management tends to select attractive service providers with outstanding hospitality skill sets. Additional criteria also tends to include trustworthiness, awareness, association, quality, loyalty and credibility. Credibility consists of trustworthiness, expertise and attractiveness of the human brand, while for nonhuman brands, the selection criteria is comprised of trustworthiness and expertise (Jeng, 2016; Spry *et al.*, 2011; Erdem and Swait, 2004). Awareness, association, quality and loyalty have been proven to be sub-dimensions of equity, and are also included in the selection criteria of human brands (Yoo and Donthu, 2001; Keller, 1993; Aaker, 1991). However, researchers have yet to identify a proper definition of equity for hotels. Yet, brand equity for hotels has been defined as "the value that consumers and hotel property owners associate with a hotel brand, and the impact of these associations on their behavior and the subsequent financial performance of the brand" (Bailey and Ball, 2006, p. 34). Researchers have provided evidence that characteristics of human and nonhuman brands have impacts on their linked nonhuman and human brands (e.g. Magnini *et al.*, 2010; Koernig and Boyd, 2009; Liu *et al.*, 2007). This is why nonhuman brands choose high credible human brands to paddle their nonhuman brands.

In particular, this study intends to explore perceptions of millennials about the impact of human brand characteristics on nonhuman brand characteristics within the context of hospitality brands. Furthermore, this research intends to also explore the impact of human brand credibility and equity on nonhuman brand credibility and equity. Moreover, the impact of human and nonhuman brand credibility on its own equity will also be observed.

In an effort to achieve these objectives, this research will contribute theoretically, empirically and practically to the existing knowledge base related to hospitality and tourism

human and nonhuman brands. Theoretically, this study will offer and discuss examples of human brands from hospitality and tourism branding. Moreover, generational differences will be presented using epochal events, the digital world and attitudes about brands. Empirically, results of this study will provide evidence that the three millennial segments (cohorts) indeed have different and individually unique perceptions about human and nonhuman brands as related to marketing, hospitality and tourism. Implications for marketing practitioners will also be proposed under the following headings which include: creation of digital word of mouth, millennial valued entertaining content, social media usage for research, and exploring human and nonhuman brands through online and preferences for broadcast TV. For hospitality and tourism practitioners, this study will propose suggestions related to the multicultural, brands with strong values and engaging the millennials with brands.

Literature review
Theory foundation
Human and nonhuman brands are linked with each other primarily due to the associative network model. Till and Shimp (1998) first presented the idea of connecting nodes through associative links in the human brain (Till and Shimp, 1998, p. 68). Using this model as an example, millennials remember their favorite human and nonhuman brands. Then, when recalling one brand, other linked and associated brands come to their minds. For instance, when millennials share experiences about restaurant services, they will definitely provide their opinions about those employees and types of customers they experienced, both online and offline. In keeping with the associative network model, their restaurant experience reminds all of their associated links of various restaurant brands they have experienced, and subsequently saved in their memory banks in the form of nodes (e.g. Collins and Loftus, 1975; Till and Nowak, 2000). In these nodes, chains of connecting nodes become engaged in the process. One node activates the other linked node and this process continues until all nodes become activated and memory is totally engaged (Collins and Loftus, 1975). This chained model explains the memory structure of humans (Till and Nowak, 2000). An understanding of this structure is significant in fully comprehending how the mind of individuals, and in this context, millennials function (e.g. Chang and Chieng, 2006), because research has substantiated that as a generation, millennials have been documented to be significantly stronger in memorizing their experiences related to brands (Nowak *et al.*, 2006). Thus, in the hospitality context, it would be correct to assume that millennials would be more active in recalling the associated nodes in the recollection process that takes them to linked human and nonhuman brands (e.g. Till *et al.*, 2008). Therefore, when millennials encounter a restaurant service experience, and then recall their experience, their views can include such issues as food quality, level of service provided by employees and the restaurant environment. In this example, food quality, employee service and the service environment are all associated nodes. Using this restaurant example, the associative network model plays a key role for millennials in recalling their restaurant service experience regarding preferred human and nonhuman brands.

Conceptual framework and hypotheses development
Millennials are the largest consumer group of purchasers of products promoted by celebrities, movie stars and sports figures. An example of this took place within the tourism setting in Russia where a large number of visitors attended the *Fédération Internationale de Football Association* (FIFA) event in 2018. FIFA, the largest sports event of the year brought together many of the largest human and nonhuman brands in Russia as sponsors for FIFA. Football (soccer) players are human brands and the name of each country/team is a nonhuman brand. Millennials represented the largest generational spectator segment of the 2018 FIFA Cup during which two of the most famous soccer players were utilized as human brands to endorse nonhuman brands. In the first example, a Brazilian football player (Neymar, Jr),

endorsed a large TV manufacturing brand, TCL. The second example involved an Argentine professional soccer player (Lionel Messi), who was used to endorse a Chinese dairy product group named "Mengniu" (Khan, 2018). In these aforementioned examples, Neymar and Messi were used as human brands to endorse nonhuman brands (TCL and Mengniu Group, respectively), substantiating the value human brands have for promoting nonhuman brands.

Human brand credibility is about believing and trusting any human brand (e.g. Spry *et al.*, 2011; Erdem and Swait, 2004). The human brand includes any individual who can be used to promote any nonhuman brand such as corporate CEO's (Scheidt *et al.*, 2018), marketing scholars (Close *et al.*, 2011), Martha Stewart (celebrity brands), Michael Jordan (athlete brands), political candidates (Hoegg and Lewis, 2011) and fashion models (Parmentier *et al.*, 2013). In this same line of reasoning, different human brands may also be recognized as ambassadors for tourism. Pitbull (Florida, 2015), Jackie Chan (Indonesia, 2014), and Arnold Schwarzenegger (Madrid, 2015) have all been used as recent examples of human brand tourism ambassadors. Research has documented that human brand credibility represents a multidimensional construct (Law *et al.*, 1998) and that it consists of three sub-dimensions: trustworthiness, expertise and attractiveness (Spry *et al.*, 2011; Joseph, 1982; Erdem and Swait, 2004). The ability to rely upon an individual as being an honest and truthful person is termed trustworthiness of the human brand. A person being knowledgeable and skilled in a particular field is known as having expertise of that human brand. Attractiveness of the human brand relates to the aesthetically pleasing physical appearance of a person. In 2015, a popular American singer with millennials (Pitbull), announced he was filming a production entitled *Sexy Beaches* on the sandy shores of Florida, known as the Sunshine State. He then promoted this by using the hashtag #LoveFL. In this way, a human brand promoted a nonhuman brand as a tourist destination for the State of Florida. This human brand also fulfilled the definition of human brand credibility because he is acknowledged as being a successful professional singer, has an attractive appearance and is known to have a truthful personality.

Nonhuman brand credibility is the degree of believability on those promises made by nonhuman brands (Erdem and Swait, 1998, 2004). All corporate brands are known as nonhuman brands because of being nonhuman and having specific names, logos or terms. A few examples of nonhuman brands are Olive Garden, Marriott, Sandals, Ruth's Chris Steak House, Gallo Wines and Westin. Nonhuman brand credibility has two dimensions: trustworthiness and expertise (Jeng, 2016; Spry *et al.*, 2011; Erdem and Swait, 2004). Sincerity, honesty and truthfulness of any brand represents nonhuman brand trustworthiness. The capability of a brand to fulfill the promises they made with their customers is termed "nonhuman brand expertise."

Brand equity is the market's worth of any human brand which is derived from the consumer's perception of that brand. Audience demand willing to see that human brand defines the human brand's worth. Nonhuman brand equity is defined as the incremental value added in any product/service because of its brand name (e.g. Farquhar, 1989). Moreover Keller (1993) documented nonhuman brand equity as "the differential effect of brand knowledge on consumer response to the marketing of the brand" (p. 2). Researchers discussed brand equity as having four dimensions: brand awareness, brand association, perceived quality and brand loyalty (Aaker, 1991; Keller, 1993). Brand awareness is the ability of any individual to recall any specific brand. Brand association is the degree with which particular brand attributes are linked in the consumers' mind, such as Lyft "Your friend with a car" and Chipotle "We're not afraid to say we're real chickens." Perception about the performance of the brand is termed perceived quality. When any individual prefers any specific brand when they have switching options is termed brand loyalty. With loyalty, consumers stay with brands whether the price is high or the quality is low (Aaker, 1991; Keller, 1993; Atilgan *et al.*, 2005; Spry *et al.*, 2011; Ng *et al.*, 2014).

Brand equity is also described as a consumer's knowledge about the brand (Bonn and Brand, 1995). Practitioners developed two scales in particular to measure brand equity based upon those previously discussed dimensions (Yoo and Donthu, 2001), named the Multidimensional

Brand Equity Scale and the Overall Brand Equity Scale (OBE). This present research adapted the OBE scale because items in that scale more clearly fulfilled the meaning of brand equity. Previous studies used the OBE scale for nonhuman brand equity research (Yoo and Donthu, 2001; Ng *et al.*, 2014). This study selected to use the OBE scale to measure human brand equity as its items appear equally applicable to both human and nonhuman brands.

Hypotheses construction
When millennials witness their favorite human celebrity, movie star, sports figure, politician, etc., endorsing or using any brand, they begin to think positively about that specific brand. As a general rule, only credible human brands endorse the nonhuman brand due to reasons of credibility (e.g. Kim *et al.*, 2014; Spry *et al.*, 2011). Through this logical extension of reasoning, millennials begin to place their trust in the information endorsed by credible human brands and assume that nonhuman brands are also credible. Researchers have documented that characteristics including credibility, equity and image, to cite just a few, positively impact their linked nonhuman brands (Magnini *et al.*, 2010; Liu *et al.*, 2007; Koernig and Boyd, 2009). Given this body of evidence, the following hypothesis is presented:

> *H1.* (a) Millennials Gen Z, (b) Gen Y (Younger), and (c) Gen Y (Older) perceive human brand credibility as having a positive impact on nonhuman brand credibility.

Various empirical research studies have examined the impact of credibility on equity in different research settings (e.g. Spry *et al.*, 2011; Ng *et al.*, 2014). Credibility of the nonhuman brand is comprised of trustworthiness and expertise and depending upon if any of these improve or worsen, it will directly impact the awareness and association of millennials. In this scenario, credibility of the human/nonhuman brand has a role in impacting equity. Further research argued that credibility plays a key role in the development of equity (Hur *et al.*, 2014; Erdem and Swait, 1998). However, this impact of credibility on equity is equally applicable to the impact of human brand credibility on human brand equity and nonhuman brand credibility on nonhuman brand equity. Therefore, *H2* is proposed as follows:

> *H2.* (a) Millennials Gen Z, (b) Gen Y (Younger), and (c) Gen Y (Older) perceive human brand credibility as having a positive impact on human brand equity.

> *H3.* (a) Millennials Gen Z, (b) Gen Y (Younger), and (c) Gen Y (Older) perceive nonhuman brand credibility as having a positive impact on nonhuman brand equity.

Co-branding is branding in which two or more brands work together for a single product or service. It is also termed brand alliance. The endorsement of human brands for nonhuman brands is also a type of co-branding (Henderson *et al.*, 1998; Seno and Lukas, 2005). In this brand alliance, both brands enjoy equal benefits in terms of equity (Motion *et al.*, 2003). In this manner, each brand is associated with one another's brand. When recalling one brand, the other brand also is recalled in the mind of millennials according to the theory of the association network model (Till and Shimp, 1998). Moreover, characteristics of human/nonhuman brands are transferable to their linked or endorsed nonhuman/human brands (Magnini *et al.*, 2010; Koernig and Boyd, 2009). In light of these arguments, we postulate the positive impact of human brand equity on nonhuman brand equity in *H4* as follows:

> *H4.* (a) Millennials Gen Z, (b) Gen Y (Younger) and (c) Gen Y (Older) perceive human brand equity as having a positive impact on nonhuman brand equity.

Methodology
Research context
Pakistan's electronic media news anchors were used as human brands and their linked news channels as nonhuman brands. These news anchors are considered as opinion leaders.

Occasionally news anchors promote different destinations through their programs and newspaper columns. Recently, a popular news anchor visited Canada and recorded a series of travel episodes that went live on air, receiving extremely high ratings. The anchor shared his on-site destination experiences with the viewing audience pertaining to hospitality and tourism highlights that included different attractions, accommodations, local wineries, novelty shops, unique restaurants and local cuisine in and around Niagara Falls, Canada. Other news anchors featured on different channels shared similar travel experiences about their travel experiences to Middle Eastern and European destinations. Thus, news anchors were selected as human brands and their linked/host news channels pertaining to travel destination programs were selected as nonhuman brands.

Pretest
A pretest was conducted for the selection of human and nonhuman brands in order to avoid any bias which may have affected the study's results. A questionnaire was designed which consisted of demographic items (age, gender and education), level of interest in current affairs, and blank spaces for respondents to fill in with the name of their favorite human brands and their linked nonhuman brands. Every respondent had to mention at least three human brand names.

Only those respondents indicating they had an interest in current affairs and who were aware of news anchors and their travel programs were selected for the pretest. Out of 90 total questionnaires distributed, 70 questionnaires were deemed acceptable for the pretest, for a usable response rate of 77.8 percent. The remaining questionnaires were either not properly completed or not returned by respondents.

In light of the pretest results, a list of human brands was prepared. The highest frequency of a human brand mentioned was 31 and the lowest was 16. From these human brands, only four human brands were selected according to the set criteria. The criteria for human brands selection included the following prerequisites: one human brand from each news channel, peak show time and human brands representing two male and two female news anchors.

Main study data collection
The population was further divided into groups based on the viewership of each human brand and included millennials who knew the selected news anchors and could respond about human and nonhuman brands. A stratified random sampling was developed for data collection. Respondents from two different cities, Islamabad and Faisalabad, were intercepted at random. Respondents were asked to participate the in this study voluntarily, with no incentive provided.

A total of 885 questionnaires were distributed and 690 questionnaires were returned, with 571 being usable, for a response rate of 64.5 percent. The unused questionnaires represented all responses from incomplete questionnaires, which were removed from the sample during the data editing process. Moreover, during data screening three outliers were identified and adjusted according to other responses for each of those individual respondents. As an example, one respondent described himself as a college student but his age was entered as "12" when actually it should have been "22." This was considered a coding input error and was corrected. The questionnaire consisted of three parts. Part one contained a brief study introduction where millennials were informed that their information would remain anonymous and that the study would not take more than ten minutes to complete, and respondents could discontinue the questionnaire at any point without penalty. Part two was comprised of demographic information that included the respondent's age, gender, education and profession. Part three contained items to measure the study variables. The questionnaire was written in English, the official language, and in Urdu, the native language of the study region. Both versions of the questionnaires were available for distribution to the millennials.

Construct instruments
In total, 30 items were included in Part three of the questionnaire. These items were structured using a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). All items were adapted from previous studies to measure the variables for this research. Details of all items are provided in Table II. Human brand credibility was measured using three dimensions that represented trustworthiness, expertise and attractiveness, and were measured with five items for each dimension which were validated by Ohanian (1990). Erdem and Swait validated the use of seven items for nonhuman brand credibility. These seven items were used to measure two dimensions: trustworthiness and expertise (2004). Human and nonhuman brand equity was measured using four items for each which was previously validated by research conducted by Yoo and Donthu (2001). These four items were developed by the same researchers used in the OBE scale. The OBE scale was based on the four dimensions of brand equity which included perceived quality, awareness, association and loyalty.

Demographics of the respondents
Of the 571 millennials responding to the questionnaire, the majority were male (57.97 percent), with the younger Gen Y millennials (64.97 percent) representing the largest age segment. The older Gen Y millennials (52.54 percent) represented the greatest segment having a bachelor's degree. Most millennials were students (62.87 percent). Detailed demographics are provided in Table I.

Results and findings
Reliability, convergent and discriminant validity
Researchers recommend confirmatory factor analysis to measure the convergent and discriminant validity of the constructs (Hair *et al.*, 2011). The results of the measurement model demonstrated good fit indexes of the model i.e. CMIN/df (χ^2/df) $= 2.21$, GFI $= 0.926$, AGFI $= 0.906$, CFI $= 0.956$, NFI $= 0.923$, IFI $= 0.956$, TLI $= 0.948$ and RMSEA $= 0.046$. These previously mentioned values illustrated that the model is fit and have all values within the acceptable range (Hu and Bentler, 1999).

Demographics variables	Frequency (*n*)	Percentage
Gender		
Male	331	57.97
Female	240	42.03
Age		
16–22	91	15.94
23–26	371	64.97
27–30	109	19.09
Education		
Matric	24	4.20
Intermediate	58	10.16
Graduation	300	52.54
Master	160	28.02
M-Phil	29	5.08
Profession		
Student	359	62.87
Self-employed	152	26.62
Job holder	49	8.58
Other	11	1.93

Table I.
Demographics of the millennials

Reliability was measured through composite reliability (CR). All CR scores were reported within the acceptable range of 0.7–0.9 (Hair *et al.*, 2011). Convergent and discriminant validity was measured through two standards for each validity measure recommended by researchers (Fornell and Larcker, 1981; Hair *et al.*, 2010). For convergent validity, two standards were set. First, factor loadings of all the items of the study should be significant and greater than 0.5. Second, the value of the average variance extracted (AVE) should also be greater than 0.5 (Yap and Khong, 2006). The findings of this fulfilled both requirements of convergent validity as provided in Table II.

Discriminant validity has two conditions. First, correlation among the constructs of the study should be less than 0.85 (Kline, 2005). Second, the value of the square of the AVE

Constructs	Item No.	Items	FL	CR	AVE
Human brand credibility (Attractiveness)	HBC1	He is attractive	0.65	0.88	0.71
	HBC2	He is glamorous	0.50		
	HBC3	He is beautiful	0.70		
	HBC4	He is elegant (decent)	Deleted		
	HBC5	He is sexy	0.71		
HBC (Expertise)	HBC6	He is an expert in his field	0.83		
	HBC7	He is experienced	0.68		
	HBC8	He is knowledgeable	0.75		
	HBC9	He is qualified	Deleted		
	HBC10	He is a skilled person	Deleted		
HBC (Trustworthiness)	HBC11	He is dependable	0.70		
	HBC12	He is an honest person	0.80		
	HBC13	He is a reliable person	0.79		
	HBC14	He is a sincere person	0.75		
	HBC15	He is trustworthy	0.78		
Human brand equity	HBE1	It makes sense to listen to this anchor instead of any other anchor	Deleted	0.78	0.54
	HBE2	Even if another anchor has the same qualities as this anchor, I prefer to listen to this anchor	0.74		
	HBE3	Even if another anchor is as good as this anchor, I prefer to listen to this anchor	0.82		
	HBE4	If another anchor is not different in any aspect (way), I feel comfortable listening to him	0.64		
Nonhuman Brand Credibility	NHBC1	The channel reminds me of someone who is competent and a good source	0.62	0.87	0.53
	NHBC2	This channel has an ability to deliver what it promises	0.83		
	NHBC3	This delivers what it promises	0.83		
	NHBC4	The programs of this channel are believable	0.72		
	NHBC5	Over time my experiences with this channel have led me to expect it to keep its promises	0.70		
	NHBC6	This channel is a name you can trust	0.65		
	NHBC7	This channel doesn't pose to be something it isn't	Deleted		
Nonhuman Brand Equity	NHBE1	It makes sense to watch this channel instead of any other, even if they are the same	0.70	0.84	0.58
	NHBE2	Even if another channel has some features (programs) as this channel, I prefer to watch this channel	0.80		
	NHBE3	Even if there is another channel as good as this channel, I prefer to watch this channel	0.82		
	NHBE4	If another channel is not different in any aspect (way) it gives me pleasure to watch channel this channel	0.72		

Notes: FL, Factor loading; CR, composite reliability; AVE, average variance extracted; HBE, human brand equity; NHBE, nonhuman brand equity; HBC, human brand credibility; NHBC, nonhuman brand credibility

Table II.
Reliability and convergent validity

should be less than the value of the correlation of the construct (Fornell and Larcker, 1981). This being stated, the study's statistical findings fulfilled the criteria set forth required for discriminant validity (Table III).

Multi-group invariance tests
A multi-group factor analysis factor analyses technique was utilized to perform the different invariance tests. Maximum likelihood was selected for the estimation of required analyses. Various invariance tests were performed, including configural and metric invariances, with the purpose of these analyses being to ensure the instruments used for this study were working exactly in same way for all three groups. In configural analysis, a baseline model was determined. The baseline model was run using the entire sample (all three groups). This model was evaluated by the model fit indexes suggested by different researchers (Hu and Bentler, 1999; Teo *et al.*, 2009). In this study, the following fit indexes are included for the configural invariance evaluation i.e. CMIN/dF = 1.61, CFI = 0.935, TLI = 0.924 and RMSEA = 0.033. Researchers proposed χ^2 difference test for the determination of metric invariance (Steenkamp and Baumgartner, 1998). Subsequent research documented that it is more accurate to measure CFI by using difference tests in combination with χ^2 difference tests (Cheung and Rensvold, 2002; Byrne, 2010; Teo *et al.*, 2009). Thus, a difference test was performed by employing a step-wise procedure between an unconstrained and fully constrained model where regression weights were constrained. The results ($\Delta\chi^2 = 56.18, p = 0.616, \Delta CFI = 0.001$) showed that all the measurements are completely invariant across the groups.

Hypotheses testing
A structural equation modeling technique was employed to test the proposed hypotheses. The structural model indicated good model fit indices i.e. CMIN/dF = 1.79, RMSEA = 0.037, GFI = 0.94, CFI = 0.971, TLI = 0.966, NFI = 0.937, IFI = 0.971. All tested hypotheses were accepted in the first step. The first step included testing the proposed model for all millennials. In the second step, Multi-group was employed to test the model across the groups. In this multi-group hypotheses testing, only one hypothesis was accepted for Gen Z and all the rest were rejected. For Gen Y (younger and older), all proposed hypotheses were accepted, as seen in Table IV.

Millennials (younger and older) of the studied area accepted the impact of human brand credibility on nonhuman brand credibility. But Gen Z (*H1(a)*) millennials rejected the impact of human brand credibility on nonhuman brand equity. These results showed that the first hypothesis was partially accepted. These results indicate that Gen Y millennials (younger and older) have the same observation, but are different from Gen Z. Gen Y millennials (younger and older) support the impact of human brand credibility on human brand equity. Respondents of Gen Z (*H2(a)*) reject the effect of human brand credibility on nonhuman brand equity. This means the second hypothesis is also partially accepted. The third

	CR	AVE	HBE	NHBE	NHBC	HBC
HBE	0.778	0.541	*0.735*			
NHBE	0.845	0.578	0.540	*0.760*		
NHBC	0.871	0.532	0.366	0.649	*0.729*	
HBC	0.881	0.713	0.557	0.422	0.499	*0.844*

Notes: CR, Composite reliability; AVE, average variance extracted; HBE, human brand equity; NHBE, nonhuman brand equity; HBC, human brand credibility; NHBC, nonhuman brand credibility. All diagonal italic values are square root of AVE

Table III.
Discriminant validity

	Hypotheses	Group	Standardized estimates	Supported/Not supported
H1	HBC→NHBC	Overall	0.552*	Supported
H1a		Gen Z	0.443	Not supported
H1b		Gen Y (Younger)	0.594*	Supported
H1c		Gen Y (Older)	0.444**	Supported
H2	HBC→HBE	Overall	0.642*	Supported
H2a		Gen Z	0.548	Not supported
H2b		Gen Y (Younger)	0.706*	Supported
H2c		Gen Y (Older)	0.526**	Supported
H3	NHBC→NHBE	Overall	0.568*	Supported
H3a		Gen Z	0.710*	Supported
H3b		Gen Y (Younger)	0.534*	Supported
H3c		Gen Y (Older)	0.534*	Supported
H4	HBE→NHBE	Overall	0.323*	Supported
H4a		Gen Z	0.287	Not supported
H4b		Gen Y (Younger)	0.339*	Supported
H4c		Gen Y (Older)	0.307**	Supported

Notes: HBC, Human brand credibility; NHBC, nonhuman brand credibility; HBE, human brand equity; NHBE, nonhuman brand equity. $*p < 0.001$; $**p < 0.01$

Table IV.
Hypotheses testing

hypothesis was completely accepted. Millennials of the segments representing Gen Z, Gen Y (younger) and Gen Y (older) also supported the impact of nonhuman brand credibility on nonhuman brand equity. The fourth hypothesis was partially accepted. Gen Z (*H4(a)*) did not support this hypothesis. Younger and older Gen Y millennials strongly supported the impact of human brand equity on nonhuman brand equity.

Discussion and implications
Implications for researchers
These study findings offer significant contributions to the existing literature addressing branding as related to millennials, and especially when applied within the context of the hospitality and tourism field. This study explored the relationship between the same constructs of human and nonhuman brands. Take for example, the first and forth hypotheses, where the first hypothesis confirmed that a relationship exists between credibility of human and nonhuman brands and the forth hypothesis demonstrated the impact of human brand equity and nonhuman brand equity. Moreover, this is the first study that explored the impact of human and nonhuman brands between their different constructs such as was conducted in the second and third hypotheses. The second hypothesis explored the relationship between credibility and equity of human brands and was positively evidenced in this study. In the third hypothesis, nonhuman brand credibility was found to have a positive impact on equity. Another contribution of this study addressed the associative network model, and provided the clear idea for the associated brands. Till and Shimp (1998), who first presented the framework of connecting associated nodes, now appears equally applicable to this study.

As seen in Table IV, results of these study's statistical findings demonstrate that younger and older Gen Y millennials have the same attitudes toward brands. However, Gen Z millennials were found to have different observations about brands. This can be seen from the results of hypotheses *H1(a)*, *H2(a)* and *H4(a)*. The following highlights summarize key differences in the perceptions and behaviors of Gen Y and Gen Z millennials.

Epochal events. Millennials of Gen Y and Gen Z segments have different ways to observe events. The mortgage crisis and gun shooting crimes are important news for Gen Y millennials whereas Gen Z millennials are more concerned about the arrest of Justin Beiber and reaching legalized age.

Digital world. Gen Y millennials never heard of a floppy disk whereas Gen Z millennials never heard of flip cell phones. Gen Y millennials were born to learn coding and other computer languages, whereas Gen Z millennials were born with I-Devices (IPads, Iphones, etc.) which open with a slide. Gen Y millennials search on Google about doctors or any disease whereas Gen Z millennials prefer to ask about this from friends or family members. About 28 percent of Gen Y millennials are excited to obtain their driver's license, whereas only 18 percent of Gen Z millennials express the same level of excitement about being able to drive independently (Info-graphics, 2017), and being in close contact with their mobile devices is more important than eating.

Attitude toward brand. A greater number of Gen Y millennials (45 percent) lack brand loyalty as many of the Gen Z millennials switch from their favorite brands to higher quality brands, and spend much more time purchasing direct from social media (66 percent) (Info-graphics, 2017). Gen Y place orders online and prefer to pick them up personally, whereas Gen Z place orders online, but would rather use home delivery services than go pick up their own orders. Gen Z ers want authenticity in brands, and the majority spend their money on experiences over something materialistic.

In light of these previously mentioned behavioral differences of Gen Y and Gen Z millennials, these research findings appear to be quite acceptable. These facts open more avenues for researchers to explore about Gen Z and Gen Y generational sub-segments, as our findings concur with others that there are indeed many behavioral differences among millennials across different demographic cohorts (Parment, 2011, 2013).

Implications for practitioners
Aside from the research implications, this study offers many opportunities for practitioners. The following practical suggestions will have implications within the existing literature under the following categories of information.

Emotional attachment. Millennials have strong emotional attachment with their preferred human brands. This strong emotional attachment increases their level of possessiveness of being able to look like their favorite human brand. They start copying their branded products and life styles. This is why it is easy for practitioners to attract millennials through human brand endorsement. Therefore hospitality products should implement the use of meaningful human brands when at all feasible to attract millennial segments.

Entertaining content. Hospitality and travel marketing managers should focus on promoting brands by providing entertaining contents on different social media sites (e.g. Lundberg, 2018). This opportunity can be exploited by brands when engaging millennials through entertaining video clips. This internet based brand promotion can also use influencing marketing strategies.

Use of social media. When millennials are unfamiliar with any product or service, their first choice as to where to seek information is Google. In this situation when they find any of their favorite celebrities (human brands) endorsing any nonhuman brand, their level of believability on that nonhuman brand will be the same for human brands. This is why human brands seem more active on social media. This enhances their fan following dramatically. Thus, tourism and hospitality nonhuman brands need to explore opportunities to capitalize on social media usage of human brands through Google search engines.

Exploring brands online. Most millennials find their preferred human and nonhuman brands online through different social media sites (e.g. Lundberg, 2018). Despite this fact, millennials are the largest cohort using ad blockers. The reason being, is that more online adds have become annoying for millennials. Thus, practitioners must choose a better method to endorse their human and nonhuman brands. Astute millennials can only be engaged in brand promotions through smart advertising. Their attention span is 8–10 seconds, so you must be very effective!

Implications for hospitality managers
Millennials are the fastest growing consumer base in the USA. According to the Pew
research center, the number of millennials will explode to 82 million by 2035. For the
hospitality industry, this means having to reshape and update products and services for
millennials. Here are some suggestions for hospitality managers.

Multicultural. Millennials are culturally diversified and knowledgeable. They know more
than one culture because of their surroundings which are enriched with diversified people
(Jones, 2017). They are used to "variety" and in particular, seek "variety of services" in restaurant
experiences. Thus, restaurants (including hotel restaurants) should consider adding different
cultural food menus and décor according to the consumers of that specific area's culture.
Hospitality managers should keep in contact with technology needs to add different languages to
their products and services. Millennials prefer and like different, unique and new things.

Brands with strong values. Millennials like brands which reflect their strong values and
recognize their appreciation as Identity, Independent and Intelligence (Jones, 2017). In addition,
they obtain and "feel" pleasure by receiving greetings for occasions like birthdays, weddings,
anniversaries, etc. These "touches" make their guest experience charming, personalized, and
meaningful. Millennials are always eager to share their hospitality and travel experiences with
friends and families. While sharing the experiences of brand all the related nodes get activated
in the mind of millennials, which is an application of associative network theory. Hospitality
and tourism destination managers targeting millennial can gain more profitability by better
understanding associative network theory.

Engage with brands before and after. Millennials represent a more intelligent and
updated consumer. Before using any brand, they obtain information about the promises
given by a brand. They gather information online and also go through the reviews of
experienced guests. While using the services of that brand, mostly they use live streaming
or upload their status on social media sites. At the end, they share their guest experience
with other social media friends and also write reviews for that brand. In this way,
millennials keep attached with brands before, during and after experiencing the brand and
sooner or later become loyal with good hospitality brands (Jones, 2017).

Conclusions and future research
The significant results of this study conclude that millennials have definite perceptions
toward human and nonhuman brands. The observations of this research confirmed that
millennials have strong perceptions about linkages between human and nonhuman brands
as millennials demonstrated the strong relationships between the same construct of human
and nonhuman brands. Moreover, the relationships of different constructs of human/
nonhuman brands also prevail. In addition, this research also provided strong evidence that
different millennial cohorts have different observations for brands. Based upon the
significant findings of this study, it has been illustrated that Gen Z millennials are aware of
human and nonhuman brands but did not become involved in those human/nonhuman
brands. As discussed earlier, Gen Z millennials are more concerned about fun related
information rather than the national level news. However, Gen Y millennials were found to
be more attracted toward human brands as compared to their linked nonhuman brands.
They demonstrated a more positive behavior toward the relationships between human and
nonhuman brand constructs with each other.

This research has some limitations due to limited resources. These limitations will lead
toward much needed future research directions in this area for tourism and hospitality
scholars. To start, this study identified popular news anchors/journals as human brands
because in the study area there were more news channels as compared to entertainment
channels. These anchors play a significant role in the society of that area. Future research

can explore different human and nonhuman brands from their geographical areas. This research only highlighted the impact of human brand constructs (credibility/equity) on similar nonhuman brand constructs (credibility/equity). Future research studies can discuss other directions of these relationships. For example, the impact of nonhuman credibility on human brand credibility and nonhuman brand equity on human brand equity should also be theoretically and empirically examined and explored extensively. In addition to this, researchers can also investigate human brands that endorse the hospitality industry. This study also suggests that more constructs should explore human and nonhuman brands using expanded variables and scales. Similarly, researchers can also empirically examine the relationships between those constructs for human and nonhuman brands.

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