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The effects of celebrity-brand congruence and publicity on consumer attitudes and buying behavior

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Abstract

Marketers use celebrity endorsements to make advertisements believable and to enhance consumer recognition of the brand name. However, once a direct link has been formed from a celebrity to a brand, the negative information about the celebrity may reflect on to the endorsed brand. Applying the S-O-R model and the balance theory, the purpose of this study is to investigate the effects of celebrity-brand congruence and publicity on consumers' attitudes toward the celebrity and brand as well as their buying intention. A survey of a 2 (congruence vs. incongruence) × 2 (positive vs. negative publicity) experimental design was conducted for this study. A total of 120 female Millennial consumers answered the survey and 105 surveys with usable data were collected. The mean age of the participants was 24 years old ($SD = 3.28$). Results found that the celebrity-brand congruence and publicity play a significant role in consumer behavior related to attitudes toward the celebrity and brand/product, as well as buying intention. Thus, retail marketers need to allocate more investigation into celebrity endorsements that match with brand image that can lead to long-term, positive partnerships.

Keywords: Celebrity-brand congruence, Publicity, Millennials, Attitudes, Buying intention

Introduction

Each day consumers turn on the television and browse the internet and are bombarded with advertisements from both known and unknown brands. This overload of advertisement hinders a brand's ability to create a unique position in the marketplace and receive attention from consumers (Rodgers and Thorson 2000). A celebrity endorsement has been used for decades as a marketing tool to promote brands or products, and in turn have become a large part of modern marketing (McCracken 1989). Especially, advertising through online social networks using celebrity endorsers to promote products has become a key practice in marketing strategy and a more powerful method than any other mass media (Li et al. 2012). Previous research suggests that as many as 25% of all television commercials and 10% of advertising budgets involve celebrity endorsements (Erdogan et al. 2001). In the United States, 14% to 19% of advertisements were featured celebrities endorsing the products and brands (Elberse and Verleun 2012).

Previous research shows that there is a direct relationship between the use of celebrities in advertisements and improvement in company profits. Thus, marketers use celebrity endorsements to make advertisements believable and to enhance consumer recognition of the brand name (McCracken 1989). The use of celebrities can help companies create their unique position in the marketplace and help influence a positive brand image and consumer buying intention (Ranjbarian et al. 2010). Thus, this leads to positive attitude toward the brand and an identifiable personality for a particular brand (Till and Busler 2000; Thomson 2006).

On the other hand, the attitudes toward a celebrity transfer to the endorsed brand, and once a direct link has been formed from a celebrity to a brand, the negative information about the celebrity may reflect on to the endorsed brand (Till and Shimp 1998; White et al. 2009). For example, a professional golfer, Tiger Woods, was involved in one of the largest celebrity scandals in 2009 and influenced the brand images he endorsed (Hawkins et al. 2012). With many of his endorsement deals, the negative publicity involving his infidelity affected the brand and the how the brand was perceived. At the time both Tag Heuer and Nike endorsed Tiger Woods. While Nike decided to stick by the golfer, Tag Heuer dropped Tiger Woods from his endorsement deal with their company (Hawkins et al. 2012). Because of the scandal, Nike lost \$1.7 million in total sales, and almost 105,000 customers (Edwards 2010). Overall, celebrity endorsement can be effectively used as a promotional strategy since celebrities are typically viewed as both attractive and likable, however, it may affect the consumer's attitudes toward the brand negatively when there is negative publicity on the celebrity endorser (Thwaites et al. 2012).

Despite the importance of celebrity endorsements, few attempts have been made to evaluate the potential impact of negative celebrity publicity, celebrity endorsement, the consumers' attitude toward the brand after the publicity scandal, and their buying intention. In addition, the effect of celebrity-brand congruence and negative publicity on consumers' buying intention is unknown. The present study addresses the research gaps by applying (1) the "Stimulus-Organism-Response (SOR)" theory to examine Millennial consumers' attitudes toward the brand and celebrity, which finally affect their buying intention, and (2) the balance theory to measure their responses to celebrity endorsed ads. Therefore, by applying the S-O-R model and the balance theory, the purpose of this study is to investigate the effects of celebrity-brand congruence and publicity on consumers' attitudes toward the celebrity and brand as well as their buying intention.

The conceptual framework

The conceptual framework for this study is based on the S-O-R theory from cognitive psychology (Zimmerman and Jonelle 2012) and the balance theory from social psychology (Heider 1958). The S-O-R theory is used to explain consumers' attitude and buying intention influenced by congruent/incongruent advertisements and positive/negative publicity. The balance theory is used to explain relationships among celebrity, publicity, and consumers' attitude and buying intention. This study predicts that celebrity-brand congruence and publicity influences attitude toward the celebrity and the brand, as well as buying intention. Furthermore, Millennial consumers' attitude toward the celebrity and brand will influence their buying intention.

Literature review

Millennials

Millennials are a viable consumer group to study because they are highly populated and active in the marketplace with an immense spending power (Giovannini et al. 2015). Due to these factors, this generation has transformed the market for every life stage they enter (Morton 2002). Millennials span around 17 years from ages 20 to 36 and are mainly children of the Baby Boomer generation. This generation comprises 76 million consumers (Giovannini et al. 2015) with a spending power of \$600 billion a year (Kennedy 2001). This is the largest generational cohort in the US and they are often referred as the Generation Y, Echo Boomers and Nexters (Morton 2002). Millennial consumers are known for having less disposable income than baby boomers, mainly because they are still young and most of them have just entered college and the workforce. This generation is also the most educated so they encountered a more challenging job market (Morgan Stanley 2016). This generation of consumers has grown up in a media saturated and consumption driven society, and are very market savvy and brand conscious consumers (Bolton et al. 2013). Millennials' buying power continues to grow as they age and they are known to "love to shop" (Lee and Cosenza 2002). Millennials who account for 33–35% of retail spending are able to stay connected with brands wherever they go and heavy users of technology including smartphones and tablet (Barton et al. 2014).

A celebrity endorser is one of the effective marketing tools in advertisements, which can exert greater influence on consumers' attitudes and buying intention. According to the new research by Roth Capital Partners reported by eMarketer 78% of Millennials are less likely to make purchases based on a celebrity endorsement (McCormick 2016) and more influenced by peer-to-peer marketing on social media platforms such as Facebook, Instagram, and YouTube (Chadha 2017). However, when Millennials follow celebrities on social media who endorse products, they are more likely to pay attention because they tend to replicate looks of celebrities they admire for their identity development (McCormick 2016). They are also more likely to be persuaded to buy the endorsed product if celebrity endorsers appeal in advertisements that match their self-image (Lippe 2001). Millennials are a large and affluent segment that retailers need to understand if they want to increase their market share. With such a large buying power, retailers are seeking to learn as much as possible about this generational cohort. The youngest segment of this cohort is college students. College students are a viable market that many retailers target because of their size, role as trendsetters, brand loyalties, early product adoptions and probabilities of higher standards of living once they graduate (Wolburg and Pokrywczynski 2001). Today's college students are the last of the Millennial cohort to enter college. Millennial college students are an important segment of the cohort to study because they have a unique buying behavior and positive attitudes toward online shopping (Arnaudovska et al. 2010).

Celebrity endorsement

As consumers' demands and expectations rise, marketers are continuously changing and updating their marketing methods in order to effectively and emotionally approach their target consumers. Thus, there has been an increase in celebrity endorsements into the

advertisement world as these popular advertisement methods provoke consumers' attitudinal and emotional reactions, and influence consumer brand choices and behaviors (Sami 2006). A celebrity is defined as a widely-known personality who is recognized by a certain group of people (Schlecht 2003). They have some characteristics, such as attractiveness, extraordinary lifestyle, or special skills, thus differing from common people and they enjoy a high degree of public awareness. Celebrities can fall into different groups based on their accomplishments, such as actors, television stars, models, athletes, musicians, and artists. Celebrities often enjoy their notoriety, and cause great influence on the endorsed product. They often become tied with their endorsed product and known for their prior accomplishments. The celebrity typically conveys a convincing message to the target market. Brand communication messages delivered by celebrities and famous personalities create and maintain higher appeal, attention, and recall in highly cluttered environments than those delivered by non-celebrities (Davies and Slater 2015).

In addition, many individuals often aspire to have similar values and lifestyles of the celebrities they deem successful (Sami 2006). Frazer and Brown (2002) concluded that these consumers selectively choose which values and celebrity behaviors that they admire to integrate into their own lives. Fans of celebrities may seek to imitate or impersonate a certain celebrity's behavior in order to increase their own personal self-esteem. This can include imitating speech, dress, communication, and the brands they choose to use and purchase (Sami 2006). These behaviors prove the power of celebrity endorsement, and why celebrities have become so important in modern day marketing. Previous research shows how celebrities have positive effects on clothing choice, product choice, buying behavior, and even healthy lifestyles (McCracken 1989; Till and Busler 1998). Researchers also found that the influence of celebrity endorsers is more effective in the United States on women than on men (Howard 2002). In terms of generation cohort, Millennials are more likely to pay attention to celebrities and purchase their endorsed products such as food, alcohol, and fashion items (Pringle and Binet 2005). Researchers found that Millennials are influenced by celebrities four times more likely than Baby Boomers (Barton et al. 2014).

Celebrity-brand congruence

Most advertisers insist that the correct selection of the right celebrity is very important for the success of the advertisement because consumers typically believe the celebrity should have high positive affect and recognition, and the image of the celebrity must match with that of the product (Choi and Rifon 2012). For example, sporting goods are endorsed by famous sportsmen: Michael Jordan and Tiger Woods endorse Nike and David Beckham endorses Adidas, etc., while the choice of a movie star is not effective to endorse sports products. An important factor in determining the effectiveness of celebrity endorsement is celebrity-brand/product congruence (Choi and Rifon 2007). A good match-up between a celebrity and a product is more effective for generating positive advertisement evaluations that enhance endorser believability and advertising effectiveness than a bad fit between the two (Davies and Slater 2015). A congruent product-endorser match is more likely to persuade consumers to buy the endorsed brand by transferring cultural meanings residing in their brand image to the product. Moreover, many studies show that a celebrity has a greater impact on consumers in terms of

attitude and purchase intention than a non-celebrity spokesperson (McCormick 2016). Previous literature identifies family and friends as being perceived to be more trustworthy than salespeople, and many consumers think of celebrities as friends although they might not actually know them (Erdogan 1999; Choi and Rifon 2007; Escalas and Bettman 2017).

At first glance, it may seem logical that congruence between the celebrity and brand endorsed should have a positive impact on the brand image and that, the stronger the link, the more impact the association should have on the brand. Furthermore, the better the celebrity is suited to the brand or product, more relevant or congruent the celebrity/brand pair is perceived to be, then the greater the positive response to advertising in terms of attitude and purchasing intent will be (Till and Busler 2000; Batra and Homer 2004). However, it is possible to imagine a more complex relationship and examine an alternative hypothesis (e.g., that a certain level of incongruence may have a positive impact on response to advertising, particularly in terms of the brand image). Indeed, a moderate level of incongruence between an expectation and an object may be beneficial, as it can be perceived to be interesting and positive (Lee and Thorson 2008). A relatively poor fit between brand and celebrity may be stimulating and encourage individuals to process the information more intensively and elaborate more (Lee 2000).

Publicity of celebrity

The positive image that celebrities cast on the target consumers will help the message in the advertisement to be more persuasive, thus making the brand more attractive to them; whereas negative information about celebrity endorsers can have a negative impact on the consumers' attitudes and beliefs (Thwaites et al. 2012). It is noted that marketers hope that their target markets' positive feelings toward the celebrity endorser will transfer onto the endorsed brand, and in turn make the brand more attractive to the audience. Therefore, problems come for the brand when the celebrity is involved in publicity that changes or damages his or her reputation. This change can potentially alter consumers' perceptions of the endorsed brand. Previous literature shows that negative information has a disproportionate influence on beliefs and judgments, and it has stronger influence than similar amounts of favorable information. Negative information seems to have a greater long-term effect on memory than neutral information (Baumeister et al. 2001). Because of how consumers react to this information, negative information about a celebrity endorser has significant impact on the consumer decision-making process. As a result, the increasing use of social media and increased access to information has made it difficult for marketers to manage the negative publicity revolving around their celebrity endorsers (Solomon et al. 2009).

Consumer attitude toward the brand and celebrity

An attitude can be defined as an individual's assessment or opinion of people's objects, advertisements or issues. In most cases, attitude tends to show stability over time, but is not necessarily permanent because it is a lasting and general evaluation of people, objects, etc.; it changes by marketing activities, such as television advertising and celebrity endorsement (Solomon et al. 2012). Internal and external factors can help shape or change a person's attitude. In regards to this study, consumers' attitude may be affected

by the influence of negative publicity and brand congruency within the advertisements. Marketers hope that their target audience will gain positive feelings toward a chosen celebrity that will transfer toward the endorsed brand and enhance the brand's standing (Choi and Rifon 2007). Celebrity endorsements with negative publicity can do as much or more to alienate them as they do to attract them (Choi and Rifon 2007). For example, if consumers have negative feelings toward a chosen celebrity, they are more likely to have negative feelings toward the endorsed brand as well. In terms of celebrity endorsements, attitude is often a commonly brought up topic. Typically, consumers have predefined attitude toward which celebrities they like and dislike based on the characteristics of credibility, expertise, trust, and attractiveness and decide which celebrities to use as persuasive tools in their advertisements. If the celebrity is well liked by the consumer, then the consumer will verify the celebrity as a source of credible information and in turn the endorsement creates a high degree of certainty and positive attitude for the consumer (Surana 2008).

Consumer buying intention

Purchase intention is defined as the potential transaction behavior and purchase likelihood of consumers exhibited after evaluating a product (Schiffman and Kanuk 2000). Purchase intentions or a customer's buying intention is the likelihood that he/she is going to buy a particular product in the future, in response to his or her need for the product, knowledge about the product, opinions about the product, and the manufacturing company/brand (Bradmore 2004). The likeability created from the celebrity endorsement and product attractiveness is a large influence on consumer purchase intention (Chaudhary and Asthana 2015). Based on external information and consumer evaluation of a product, consumers may either have high or low purchase intention. Consumers are more likely to purchase a product with high purchase intention, whereas they are less likely to purchase a product with low purchase intention. Purchase intention has many influences such as price (Alford and Biswas 2002), attitude toward the brand (Johnson and Russo 1984), and brand loyalty. Consumers search their previous experiences for information regarding the goods they intend to purchase (Bradmore 2004). Once the correct amount of information is obtained, the consumer will start to evaluate and consider alternatives for the product needed. Often times, purchase intention is used to measure the behavioral intentions of the consumers.

S-O-R theory

Previous literature has stated the importance of using the Stimulus-Organism-Response framework within a research study based on consumer behavior (Jacoby 2002). Also known as the S-O-R model, this framework hypothesizes that environmental cues or stimuli (i.e., stimulus) affect the consumer's emotional state (i.e., organism), which will lead to their behavior being affected (i.e., response) (Rajaguru 2014). A model of this framework has been developed by separating the variables into their appropriate places in the framework. The S-O-R framework has been extended for applications in advertising (Olney et al. 1991) and many areas of consumer behavior (Rose et al. 2012).

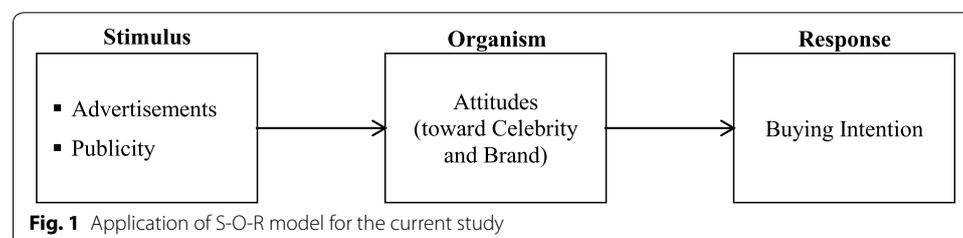
Stimulus is defined as an influence that arouses an individual. Stimulus is also considered to be environmental cues that affect the emotional state of the consumers, based

on the stimulus the overall behavior of the consumer is altered and thus the response (Zimmerman and Jonelle 2012). In this study, there are two stimuli: advertisements and publicity, which influence the Millennials' internal state. Organism is considered to be the emotional state after the stimuli are introduced. The organism for this study represents the consumers' emotional responses toward the celebrity and brand (Zimmerman and Jonelle 2012). This is the state when the consumer starts to form opinions, thoughts, and emotions toward the advertisement, celebrity, and the brand. The current study proposes that two stimuli (i.e., advertisements and publicity) exert significant effects on Millennials' attitudes toward the celebrity and brand.

Response is the last segment of the S-O-R framework. Previous literature characterizes response as the predicted consumer behavioral response to the reactions within the organism section of the model (Zimmerman and Jonelle 2012). In this study, the response is the Millennial consumer's overall buying intention. Based on the stimulus and organism the consumer's response will be different. It is predicted that based on the advertisements and publicity, the Millennial consumers' buying intention will either be affected positively or negatively (see Fig. 1).

Balance theory

The balance theory, which was derived from social psychology, examines the interpersonal relationships and the attitude development and transformation within the relational triads (Heider 1958). Simply, the balance theory explains that individuals in a triad seek balance in their interpersonal relationships among their attitudes toward these relationships. Heider (1958) proposed that interpersonal attitudes (i.e., the positive or negative relationship of a person to another person to another impersonal entity) and unit relationship (i.e., two entities belonging to a class through relations such as similarity, causality, membership, possession or belonging, and such a relationship can be neither positive nor negative) influence each other. In the case of three entities, a balance state exists if all three relations are positive in all respects or if two are negative and one is positive (Heider 1958). Any unbalanced state would trend towards achieving balance: if no balance state exists, then force towards this state will arise. Either the dynamic characteristics will change, or the unit relations will be changed through action or through cognitive reorganization. If change is not possible, the state of imbalance will produce a tension. Retail marketers often create a positive sentiment relation between the consumers and the product by forming a positive unit relation between a product (e.g., buying fashionable clothing or driving a high-performance car) and a well-known personality (Solomon et al. 2012). The balance theory thus explains the effectiveness of celebrity endorsements based on the celebrity's image and consumers' attitude. Within

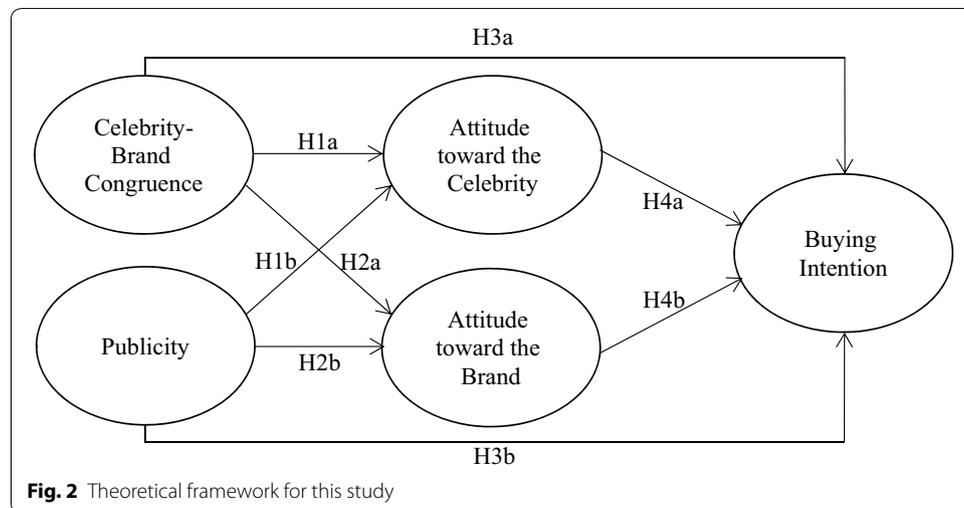


the balance theory, if a consumer has positive attitude toward a celebrity using a certain product or service, then he/she is more likely to have positive attitude toward that product or service. However, consumer’s negative attitude toward the celebrity involved in personal scandal or negative publicity can result in consumer’s negative attitude toward the brand. The balance theory in this study states that both positive publicity and consumer’s attitude toward the celebrity or brand will result in positive buying intention. Also, positive attitude toward the celebrity and positive attitude toward the brand will result in positive buying intention.

Hypotheses development

A total of seven hypotheses was developed for this study based on the literature review and theoretical frameworks (see Fig. 2). Previous literature has shown that celebrity endorsers can exert greater influence on consumers’ attitude and buying intention (Principle and Binet 2005; Sami 2006; McCormick 2016). Consumers’ attitude is more positive when there is a celebrity-brand congruence (Till and Busler 2000; Batra and Homer 2004) and positive information about celebrity (Thwaites et al. 2012) are perceived. Consumer’s purchase intention has been found to be influenced by attitude toward the celebrity (Solomon et al. 2012) and attitude toward the brand (Johnson and Russo 1984; Spears and Singh 2004). Based on the foregoing discussion, this study predicts that both celebrity-brand congruence and publicity have significant effects on attitude toward the celebrity and the brand, as well as buying intention. Therefore, following hypotheses are proposed:

- H₁*: (a) Celebrity-brand congruence and (b) publicity will influence attitude toward the celebrity.
- H₂*: (a) Celebrity-brand congruence and (b) publicity will influence attitude toward the brand.
- H₃*: (a) Celebrity-brand congruence; and (b) publicity will influence buying intention.
- H₄*: (a) Attitude toward the celebrity; (b) attitude toward the brand will influence buying intention.



This study also hypothesizes that Millennial consumers’ attitude toward the celebrity, attitude toward the brand, and their buying intention would be significantly different under the conditions where two stimuli (e.g., celebrity-brand congruence and publicity) are manipulated. The design was analyzed through the use of a one-way analysis of variance (ANOVA) procedure. These hypotheses include:

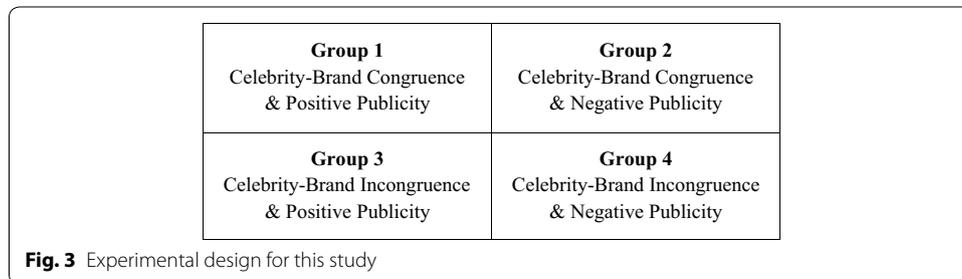
- H₅: Attitude toward the celebrity will be different by (a) celebrity-brand congruence and (b) publicity.*
- H₆: Attitude toward the brand will be different by (a) celebrity-brand congruence and (b) publicity.*
- H₇: Buying intention will be different by (a) celebrity-brand congruence and (b) publicity.*

Method

Sample and procedure

A target sample of college students between the ages of 18–25 were invited to participate in the study. The researcher recruited female college students throughout a large Southeast university in the US as current college students are Millennial consumers. A Qualtrics survey of a 2 (congruence vs. incongruence) × 2 (positive vs. negative publicity) experimental design was conducted for this study (see Fig. 3).

An email invitation with a survey link was sent to students in a Southeast university of the US to complete the online survey. Once participants agreed to fill out the questionnaire in the survey website, they were encouraged to fill out the survey questions mainly based on a 7-point Likert scale ranging from “1 = strongly disagree” to “7 = strongly agree.” During the survey, they were randomly assigned to see conditions in which the advertisement was either celebrity-brand congruence or not. The scale of celebrity-brand congruence consisting of 4 items was adopted from Choi and Rifon (2012). An example statement is “I think Sarah Jessica Parker promoting Steve Madden shoes is a good fit”. In addition to celebrity-brand congruence, the random assignment was also governed whether news story about the celebrity is positive or negative. After looking at the advertisements and the news, respondents were asked to rate their attitude toward the celebrity and brand on a 7-point semantic scale between two bipolar adjectives, such as “Unpleasant-Pleasant,” “Unfavorable-Favorable,” “Bad-Good,” or “Unlikely-Likely”. The news scenarios were created by the researchers and pilot tested to measure for validation and manipulation check. Example item used to measure attitude toward



the celebrity included “How would you describe Sarah Jessica Parker after looking at this ad and news?” The participants were asked to rate their buying intention using a 7-point semantic scale (1 = Unlikely/Improbable/Impossible; 7 = Likely/Probable/Possible). An example item used to measure buying intention is “How interested are you in purchasing Steve Madden shoes after looking at this ad and news?” Finally, they answered the questions including participants’ demographic information, such as gender, age, level of education, and ethnicity. SPSS 22 was used to help analyze the data. Descriptive and frequency analyses were used to compute the mean scores based on the respondents’ demographic files. Then, an exploratory factor analysis, multiple regression, and one-way ANOVA analysis were performed to test the hypotheses. The data was securely stored with a password in the researcher’s computer. Only general demographic information was collected about the participants.

Instrument development experiment design

In this study, advertisements were developed to convey celebrity-brand congruence and celebrity-brand incongruence for the female celebrity. Sarah Jessica Parker (i.e., SJP) was chosen as the celebrity endorser for this study based on a preliminary survey given to 55 college students. The students were asked to state which out of 10 celebrities were thought to be the most fashionable (SJP, Jennifer Lawrence, Jennifer Anniston, Kylie Jenner, Kendall Jenner etc.), and what products they seemed to be associated with. In the end, SJP was selected for this study as a majority of the students chose her to be the most fashionable. The brands, Steve Madden (congruent) and Hoover (incongruent), were chosen to be endorsed. In addition to advertisement manipulation, a negative publicity story and a positive publicity story were created to influence consumer’s attitudes toward the advertisement, brand and celebrity. In this study, Qualtrics randomly distributes the survey to the participant. Each female participant saw (1) randomly selected advertisement and (2) randomly selected publicity story. For example, one participant might see SJP with shoes and a negative news story while another might see SJP with a vacuum and a positive news story. Below are pictured examples of the manipulations used in the study (see Fig. 4).



SJP positive publicity

Sarah Jessica Parker was awarded the NYC Citizen of the Month award last night. She has been very active in the community philanthropically for over 10 years. As of this year, Parker started a new foundation called, "Uplift the Children" in order to bring awareness to the city's impoverished children. This program seeks to bring education, life necessities, and homes for the children in need. Parker has said she will continue to improve the program and donate money to those in need in her beloved community.

SJP negative publicity

Sarah Jessica Parker was seen yesterday walking into the St. Regis hotel in NYC with an unidentified younger man. The pair were seen walking into the hotel and checking into a hotel room at the front desk. After 3 h, the couple was seen leaving the hotel hand in hand. Parker has been married to Matthew Broderick since 1997, and there is no knowledge of the couple splitting up. The couple are parents to 3 children.

Results**Background characteristics**

A total of 120 college students answered the survey and 105 surveys with usable data were collected. The average age was 24 years old with standard deviation of 3.28. Table 1 shows the education levels of the respondents and more than half (51.4%) of respondents were graduates from 2-year colleges and 29.5% of them were graduates from 4-year colleges, followed by 9.5% of high school graduates, and 6.7% master's graduates (see Table 1).

Table 1 Demographic information

Characteristics	N	Percent
Level of education		
2 year degree	54	51.4
4 year degree	31	29.5
High school	11	10.5
Master's Degree	5	4.8
Ph.D.	2	1.9
Other	1	1.0
Total	105	100.0
Ethnicity		
Caucasian	75	71.4
Hispanic/Latino	9	8.6
Asian/American	9	8.6
African-American	5	4.8
Asian/Pacific Islander	3	2.9
American Indian	2	1.9
Other	1	1.0
Total	104	100.0

Regarding classified ethnicity, most of the respondents were Caucasian (71.4%) and the second largest groups were, Hispanic/Latino (8.6%) and Asian/American (8.6%), followed by African-American (4.8%), Asian (2.9%), and American Indian (1.9%).

EFA and regression analyses

An exploratory factor analysis was performed and a factor loading above .40 was retained for each factor and cross-loaded items were removed from the further analyses (e.g., celebrity-brand congruence, negative publicity, attitude toward the celebrity and brand, and buying intention) (see Table 2). For the variables of celebrity-brand congruence, negative publicity, attitude toward the celebrity and brand, and buying intention, principal component factor analyses using Varimax rotation were performed on the multiple items to divide into a factor structure. In order to ensure the consistency of variables, a reliability test was carried out using Cronbach's alpha ($\alpha = .70$) to select the final items and each factor has a satisfactory reliability above .90 (see Table 2), indicating the items within each instrument were consistently used to measure the variables across each Millennial consumer (Santos 1999).

Table 2 Results of exploratory factor analyses

Items	Factor loading	Reliability	Variance extracted (%)
Celebrity-brand congruence		.99	97.04
Good fit	.99		
Compatible	.99		
Congruent	.98		
Make sense	.98		
Publicity		.96	93.53
News is negative aspect of SJP	.97		
News is negative publicity	.97		
SJP is surrounded by negative publicity	.96		
Attitudes toward the celebrity		.97	90.66
Pleasant	.97		
Likable	.95		
Good	.97		
Favorable	.97		
Wise	.90		
Attitudes toward the brand		.97	87.63
Pleasant	.95		
Likable	.96		
Interesting	.96		
Good	.95		
Favorable	.94		
Wise	.86		
Buying intention		.97	94.42
Likely	.98		
Probable	.97		
Possible	.97		

Multiple regression analyses were used to test H_1 , H_2 , H_3 , and H_4 concerning whether relationships among the variables exist. Regarding H_1 , results showed the overall model was significant ($R^2 = .526$, $F = 56.487$, $p < .001$) and both celebrity-brand congruence ($\beta = .381$, $p < .001$) and positive publicity ($\beta = -.586$, $p < .001$) positively influenced attitude toward the celebrity (see Table 3).

A multiple regression analysis to predict attitude toward the brand based upon celebrity-brand congruence and negative publicity was conducted for testing H_2 . The regression model for the effect of celebrity-brand congruence and positive publicity was significant ($R^2 = .446$, $F = 41.014$, $p < .001$) and both celebrity-brand congruence ($\beta = .598$, $p < .001$) and positive publicity ($\beta = -.250$, $p < .01$) were significant predictors of attitude toward the brand (see Table 4). The respondents also reported significantly greater positive attitude toward the brand based on the celebrity-brand congruence than publicity.

Regarding H_3 , celebrity-brand congruence and negative publicity were the independent variables and buying intention was the dependent variable. Regression analysis results revealed that the overall model was significant ($R^2 = .370$, $F = 29.904$, $p < .001$). Celebrity-brand congruence positively influenced respondents' buying intention ($\beta = .583$, $p < .001$). However, positive publicity did not predict respondents' buying intention ($\beta = -.131$, $p > .01$) (see Table 5). Therefore, H_3 , predicting direct effects of celebrity-brand congruence and publicity on buying intention, was partially supported.

For H_4 was tested to predict respondents' buying intention based upon their attitude toward the celebrity and brand. The multiple regression model for the effect of the

Table 3 Celebrity-brand congruence/publicity and attitude toward the celebrity

	<i>Df</i>	<i>R</i> ²	<i>F</i>	<i>B</i>	<i>t</i> -value	<i>Sig</i>
DV: attitude toward the celebrity	102	.526	56.487			.000***
Celebrity-brand congruence				.381	5.560	.000***
Publicity				-.586	-8.554	.000***

DV dependent variable

Table 4 Celebrity-brand congruence/publicity and attitude toward the brand

	<i>Df</i>	<i>R</i> ²	<i>F</i>	<i>B</i>	<i>t</i> -value	<i>Sig</i>
DV: attitude toward the brand	102	.446	41.014			.000***
Celebrity-brand congruence				.598	8.088	.000***
Publicity				-.250	-3.375	.001**

DV dependent variable

Table 5 Celebrity-brand congruence/publicity and buying intention

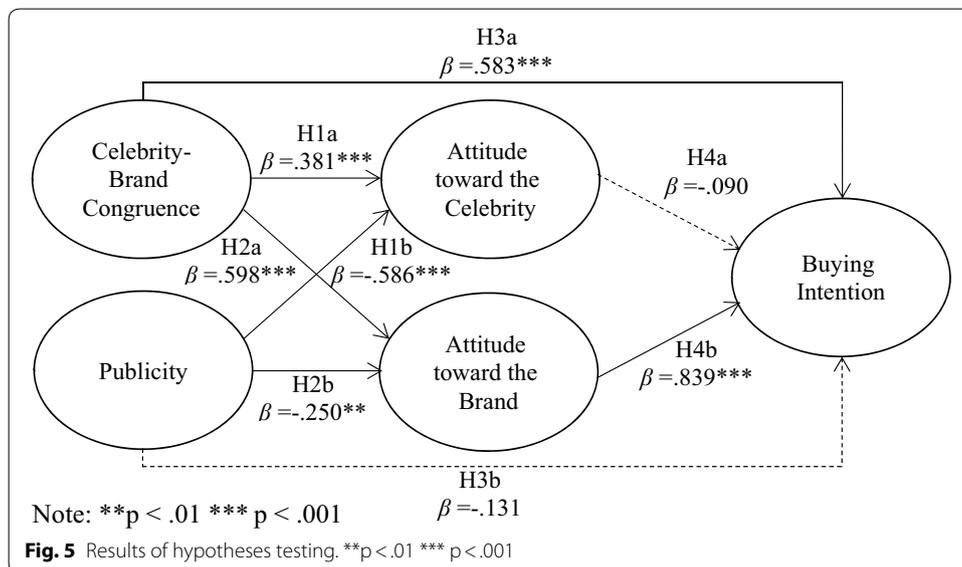
	<i>Df</i>	<i>R</i> ²	<i>F</i>	<i>B</i>	<i>t</i> -value	<i>Sig</i>
DV: buying intention	102	.370	29.904			.000***
Celebrity-brand congruence				.583	7.383	.000***
Publicity				-.131	-1.666	.099

DV dependent variable

Table 6 Attitude and buying intention

	<i>Df</i>	<i>R</i> ²	<i>F</i>	<i>B</i>	<i>t</i> -value	<i>Sig</i>
DV: buying intention	102	.612	80.592			.000***
Attitude toward the celebrity				-.090	-1.088	.279
Attitude toward the brand				.839	10.174	.000***

DV dependent variable



attitude toward the celebrity and brand was statistically significant ($R^2 = .612, F = 80.592, p < .001$). However, the variable of attitude toward the brand ($\beta = .839, p < .001$) was the only significant predictor of buying intention (see Table 6 and Fig. 5).

ANOVA analyses

One-way ANOVA analyses were performed to test H_5, H_6 and H_7 . ANOVA results showed that most of the hypotheses, except for H_5a , were supported with a statistically significant level ($p < .05$) (see Table 7). Regarding H_5 , there were significant differences among 4 different groups in terms of respondents’ attitude toward the celebrity, $F(3101) = 12.650^{***}, p < .001$ and toward the brand, $F(3101) = 4.624^{**}, p < .01$ with regard to congruence and publicity. The Bonferroni post hoc test was conducted to determine which groups were significantly different. The first group (congruence and positive publicity) has the most positive attitude toward the celebrity ($M_{group1} = 5.90, SD = 1.32$) compared to the second group (congruence and negative publicity) ($M_{group2} = 4.22, SD = 1.45$) and the fourth group (incongruence and negative publicity) ($M_{group4} = 3.95, SD = 1.70$). Also, the second group ($M_{group2} = 4.22, SD = 1.45$) has more negative attitude toward the celebrity compared to the third group (incongruence and positive publicity) ($M_{group3} = 5.73, SD = 1.28$). The third group ($M_{group3} = 5.73, SD = 1.28$) has more positive attitude toward the celebrity compared to the fourth group ($M_{group4} = 3.95, SD = 1.70$).

For H_6 , there was a significant difference in consumers’ attitude toward the brand, $F(3101) = 4.62^{**}, p < .01$. The mean score of attitude toward the brand for the first group

Table 7 One-way ANOVA results

	Sum of square	df	Mean square	F	Sig
Attitude toward the celebrity					
Between groups	80.159	3	26.720	12.650	.000***
Within groups	213.329	101	2.112		
Total	293.488	104			
Attitude toward the brand					
Between groups	33.255	3	11.085		
Within groups	242.141	101	2.397	4.624	.005**
Total	275.396	104			
Buying intention					
Between groups	44.053	3	14.684	4.239	.007**
Within groups	349.909	101	3.464		
Total	393.962	104			

** $p < .01$, *** $p < .001$

($M_{group1} = 5.67$, $SD = 1.70$) was different from the fourth group ($M_{group4} = 4.10$, $SD = 1.71$). Lastly, H_7 , a statistically significant difference was also reported among 4 groups on buying intention, $F(3101) = 4.24^{**}$, $p < .01$. The buying intention level for the first group ($M_{group1} = 5.37$, $SD = 1.96$) was significantly higher compared to the third group (incongruence and positive publicity) ($M_{group3} = 3.90$, $SD = 1.54$) and the fourth group ($M_{group4} = 3.68$, $SD = 2.19$).

Discussion

This study examined (1) the effects of celebrity-brand congruence and publicity on Millennial consumers' attitude toward the celebrity and brand, as well as buying intention, and (2) the differences among their attitude toward the celebrity and brand, and buying intention based on the manipulation of celebrity-brand congruence and publicity. Among the hypotheses, H_1 , H_2 , H_6 , H_7 were fully supported. The current study found that both celebrity-brand congruence and positive publicity positively influenced attitude toward the celebrity and brand. Although previous researchers have found positive image toward the celebrity endorser will make the brand more attractive to the audience (Thwaites et al. 2012), the impact of celebrity-brand congruence played a more important role in predicting attitude toward the brand than that of publicity in this analysis. This finding implies that congruence factor became more critical in evoking Millennials' positive attitude toward the brand. The results showed that there was a significant difference in the influence of celebrity-brand congruence on buying intention. The publicity, however, did not directly influence buying intention. There were also significant differences among 4 groups on attitude toward the celebrity and brand, and buying intention. The results supported the successful application of the S-O-R model and balance model on the relationship among congruence, publicity, attitude, and buying intention. Organism (attitude) was found to be different by two stimuli (brand-congruence advertisement and publicity) and based on the organism, consumer's response (buying intention) was either positively or negatively affected. Research findings explain the presence of a balance state when two positive links (e.g., publicity and attitude toward the celebrity) were

added, consumer's buying intention will be positively changed, which in turn bring a positive link between the consumer and the product.

Previous findings from Thwaites et al. (2012) showed that a consumer's attitude toward a celebrity was not influenced by the impact of negative information including rumor, media footage, and celebrity publicity on celebrity ad endorsements. This study, however, found that Millennial consumers' attitude toward the celebrity, attitude toward the brand, and their buying intention would occur to the greatest difference under the condition where celebrity-brand congruence is combined with positive publicity. The first group (congruence and positive publicity) had the highest mean scores on attitudes toward celebrity and brand, and buying intention compared to the fourth group (incongruence and negative publicity) with lowest mean scores. This means Millennial consumers who are exposed to both celebrity-brand congruence and positive publicity appear to have significant differences in attitude toward the celebrity and brand and tend to like and purchase the brand/product compared to those who are not exposed to them. Interestingly, although previous researchers have found that negative publicity about the celebrity can influence the attitudes and buying intention (Till and Shimp 1998), this study found that the congruence is a more important influencer than publicity to motivate Millennial consumers to purchase a brand/product. That is, the celebrity-brand congruence plays a significant role in consumer behavior related to the brand/product. Also, the findings reveal that consumers' attitude toward the celebrity and brand positively influenced their buying intention significantly, but the impact of attitude toward the brand is observed to be considerably greater than that of attitude toward the celebrity in generating buying intention. Thus, Millennials with positive attitude toward the brand are more likely to purchase the products from that brand than those with positive attitude toward the celebrity.

Implications and future study

The study results provide an important theoretical implication that Millennial consumers' buying intention is mainly influenced by the celebrity-brand congruence and attitude toward the brand than the publicity and attitude toward the celebrity, which were not examined in previous research (Johnson and Russo 1984; Till and Shimp 1998; Erdogan 1999). This finding suggests that Millennial consumers who perceive a high degree of the fit between a celebrity and a brand have positive attitude toward the brand, and in turn this influences purchase decisions, This can be applied to their behavioral loyalty for actual repurchase intention and positive word of mouth. Another value of this study is the research finding related to the balance theory. The balance theory assumes that when all three valences (publicity, attitude toward the celebrity, and buying intention) are positive, then there is a balance state. If negative sign is formed in any part of triad, a balance state will be lost and there will be dramatic change in consumer's attitude. However, there are many other factors influencing consumers' buying intention and only two factors were examined in the present study. Many more variables affect the buying intention of consumers. Therefore, further research with other potential variables, such as fashion involvement, media exposure, celebrity scandal, and source credibility, and possible moderating variables (e.g., personality traits and celebrity-consumer connection) can help better understand the relationship between consumers' attitudes and buying intention.

Regarding the effects of congruence and publicity, given that this positive combination of brand congruence and a celebrity's publicity plays an important role in creating positive attitudes toward the celebrity and brand, the results of this study would help retail marketers to select the celebrities matched with their brands, as well as to monitor positive publicity for the effectiveness of their endorsement. Because celebrity endorsements are closely related to a company's brand recognition and sales in today's marketing environment, it is imperative to understand how they affect consumers' buying behavior. Understanding the importance of celebrity-brand congruence and publicity can provide not only helpful insights on the factors marketers should consider when a celebrity is not really connected to the brand image or becomes associated with negative publicity. This will result in higher consumer buying intention, which in turn would positively affect the company sales.

As Millennials love to shop and are brand and fashion conscious (Bolton et al. 2013; Noble et al. 2009), it is essential for retail marketers and managers to determine the right celebrity who fits with the brand/product and to communicate this linkage between the celebrity endorser and a brand as this can help Millennials to identify the brand/product that reflects their self-perception (Lippe 2001) and therefore, they are more likely to purchase and be loyal to this brand/product. It is suggested that retail marketers should reach Millennials whose choices are directly influenced by the content on Social Networking Sites (SNSs) by conducting a viral marketing campaign through the social media pages of celebrity endorsers that they like and trust to build influence through SNSs. Retail marketers are also suggested to allocate more investigation into celebrity endorsements that match with brand image and to focus on increasing opportunities for having good partnerships with brand companies that generally sponsor famous celebrities with positive publicity. Once a celebrity signs a contract with a company, it is recommended that the firm requires the celebrity to follow rules of the handbook or guidelines where moral standards are discussed. Also, compensation for a loss needs to be clearly defined in order to avoid incidences that may smear their reputation and trustworthiness in the eyes of the public. While attractiveness is easily attained, truth worthiness is hard to achieve. Thus, agents and celebrity handlers should respond to the public through a swift and sincere apology when the celebrity has made any improper behavior and a negative scandal.

Further research is suggested to conduct more in-depth studies with a qualitative approach where the mechanism of brand congruence and negative publicity are being explored in order to further obtain a broader foundation of knowledge with respect to the celebrity endorsement. This study is limited to two brands and the celebrity relationships. Other celebrities and brands in the different product categories could generate different results. Overall sample size targeting college students were small and this might affect the results of this study. It is recommended that future research should recruit a larger sample with equal numbers of gender populations to further understand Millennial consumers' attitude toward the celebrity and brand, and buying intention. Future research could also be conducted with different demographic characteristics, such as more diverse ethnic samples from different countries, other age groups (e.g., baby boomers and generation X), and male participants to clarify more specific issues that can be beneficial for the retail marketers.

Authors' contribution

JHJM developed the research framework and drafted the manuscript based on research findings. HJJC developed the research method and synthesized the manuscript. T-MCJ helped develop research design. MZ reviewed literature and collected data. All authors read and approved the final manuscript.

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Competing interests

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