

**The effect of celebrity on brand attachment: social media celebrity or
well-known celebrity?**

Ting Tang

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Signed by the final examining committee:

_____ Raymond Paquin _____ Chair

_____ Onur Bodur _____ Examiner

_____ Tieshan Li _____ Examiner

_____ Bianca Grohmann _____ Supervisor

Approved by:

Chair of Department or Graduate Program Director

Dean of Faculty

Date _____

Abstract

Previous academic research has focused on the effect of the celebrity on brands by examining their characteristics and their congruence with brands. The aim of this paper is to reveal the effect of psychological distance on self-concept and how it determines brand attachment. We additionally compare two types of celebrities to reveal the different consequence. We suggest that actual self-congruence (vs. ideal self-congruence) increases psychological proximity, leading to higher consumer-celebrity attachment and brand attachment. In particular, we argue that social media celebrities (vs. well-known celebrity) can decrease psychological distance with consumers and boost brand attachment. We detected participants' familiarity with the celebrities and assigned them to different conditions to examine their self-concept, psychological distance, attachment to celebrities and brand attachment. Findings show that consumers' actual self-congruence and ideal self-congruence negatively influences psychological distance. The less the psychological distance between celebrities and consumers, the higher the consumer-celebrity attachment and brand attachment. Furthermore, consumers perceive higher actual self-congruence and lower psychological distance with social media celebrities. Social media celebrities also present significant difference with well-known celebrities in emotional brand attachment. In terms of managerial implication, companies should highlight celebrity's actual self and ideal self in order to diminish their psychological distance between consumers and celebrities. Moreover, if the brand advocates the actual self-image of target customers, partnering with social media celebrities would be a superior choice. This strategy would not only generate higher emotional attachment than using main stream celebrities, it would also save the brand on costly endorsement fees.

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Introduction

Companies often attempt to leverage the fame of celebrities to increase brand recognition and brand equity, as consumers can easily associate characteristics of a celebrity with a brand (e.g., the association of beauty and elegance of Keira Knightley with Coco Mademoiselle Perfume). However, using well-known celebrities for endorsements can be costly. As such, many brands start looking for the alternative solutions, such as bloggers or YouTubers who have a certain number of followers online. For instance, in 2010, Lancôme partnered with Michelle Phan to create beauty makeup tutorials, which gained more than 1.2 million views per day for that period of time (Morrissey, 2010). Michelle Phan started as a YouTuber by teaching people makeup. After a few years, she owned her own company, Ipsy, which is estimated to value 800 million dollars (Griffith, 2015). The same strategy was taken by Dick's Sporting Goods. The company recruited social media influencers to create brand content, and encouraged their followers to engage in Dick's holiday campaign. As a result, Dick's Sporting Goods achieved 130,000 clicks and 6.2 million engagements in its marketing campaign by working with multiple social media influencers (Johnson, 2015). These examples demonstrate that the power of social media celebrities should not be overlooked. However, most of the previous research has focused on well-known celebrities in experiments or discussed the impact of well-known celebrities. As the Internet has created more possibilities for endorsement contexts, it is important to consider the impact of social media celebrities on the success of communication strategies.

The previous literature comprises extensive research on celebrity endorsement. The earliest research focuses on exploring celebrity credibility and the match-up hypothesis which refers to the congruence between the product image and the celebrity image (Kamins, 1990). This stream of research concentrates on the characteristics of celebrities and their match with products or brands.

This research has examined the effect of celebrity credibility of different spokespeople (e.g., Hovland and Weiss, 1951; McGuire, 1969; McCracken, 1989) and different combinations of products and celebrities in the match-up hypothesis (Kamins, 1990). Recent research examines celebrities from a new angle. It considers the celebrity as a co-brand partner in order to see the effect they have on perceived benefits, attitude, purchase intention, and brand judgment (Ilicic and Webster, 2013). Some discuss the effect of multiple endorsements and consumer-celebrity attachment on consumers' attitude toward advertisements, brands and consumers' purchase intention (Ilicic and Webster, 2011). These articles pay attention to the effect of self-congruence and different types of celebrities. They emphasize the importance of perceived fit between consumers and the celebrity, which motivates consumers to draw on the association with the celebrity.

Liviatan, Trope, and Liberman (2008) investigated interpersonal relationships and claim that people perceive those who are similar to them in a low construal way, in other words, they are able to tell more concrete details from the similar person. It is possible that the fit between celebrity and consumers can help them to know the celebrity more and draw more connections. Once consumers feel more psychologically accessible to the celebrity, the celebrity can then affect their perception to the brand or purchase intention. If this is the case, it not only offers more insight into the effect of celebrity endorsement on brand attachment but also provides a potential, cost-efficient way for companies to advertise. This paper aims to elucidate the role of celebrity in the relationship involving consumers, celebrity and brand and to discover the effect of self-congruence between consumers and celebrities. In the end, it will address how self-congruence affects psychological distance and brand attachment. The paper also adopts social media celebrities and well-known celebrities in the study to see the difference regarding self-congruence, psychological distance and attachment.

Literature Review

Celebrity Endorsement

In the past literature, there are two basic models in celebrity endorsement: the source credibility model and the source attractiveness model. The source credibility model focuses on the dimensions of the celebrity's "expertise" and "trustworthiness" (Hovland and Weiss, 1951), and the source attractiveness model focuses on "familiarity", "likability", "similarity" and "attractiveness" (McGuire, 1969). In addition, research proposes a match-up hypothesis, which argues that physical attractiveness can enhance a celebrity's credibility when the celebrity is endorsing attractive-related products (Kamins, 1990). However, other research counters that the "expertise" dimension is a more useful basis (compared to "attractiveness") to match endorsers and a brand (Till and Busler, 1998). In the research of Till and Busler (1998), for example, an athlete/energy bar pairing showed more fit than other combinations in endorser (actor or athlete) and product (candy bar or energy bar) combinations. There is extensive research discussing celebrity credibility, as it is an important factor to influence brand equity (Spry, Pappu and Cornwell, 2011).

However, criticizing the source credibility and source attractiveness models, McCracken (1989) claims that these two models cannot capture the role of celebrity, and are insufficient to explain the endorsement process. He proposes a Meaning Transfer Model, such that the meaning conveyed by the celebrity might come from the stage persona or other aspects, which is way more complex than what the two models can explain. McCracken (1989) argues that there are three stages of meaning transfer in celebrity endorsement. The first stage covers the basic demographical features, such as gender, class, age, personality and lifestyle. Celebrities are chosen for advertisements to represent these features. In the second stage, the advertisement team will choose the celebrity according to

what kinds of “symbolic properties” they want to embed in products. In the final stage, the customers extract the meaning from product to reflect self and the world (McCracken, 1989). However, there is no empirical research that examines to what extent meaning is transferred from celebrities to consumers.

Besides the qualification of the celebrities themselves, research concentrates on the congruence of brands and celebrities. According to the Associative Network Memory Model, human memory is defined as “a network consisting of various nodes connected by associative links” (cf. Till and Shimp, 1998, p. 68). Specifically, celebrity and the brand each represent a node; the activation of the node of celebrity will activate the node of the brand via the link between them, which eventually cause the association between the two. As such, the fit between the celebrity and the brand results in stronger attitude toward the brand. Not only does the relevant information (e.g., choosing an appropriate celebrity that fits the brand) in the advertisement matter, researchers also discovered that irrelevant information, such as the inconsistency between the product and the celebrity as well as the messages delivered, causes negative impressions/emotions toward the celebrity (Alperstein, 1991). Irrelevant information might lead to a brand dilution effect, and consequently affect consumers’ perception and judgment negatively (Ilicic and Webster, 2013).

With previous research discussing the factors affecting celebrity endorsement, more recent research concentrates on how celebrities affect consumers’ attitude and their decision-making process. The following sections will discuss the effect of celebrities in the context of self-concept, and the effect of self-congruence with celebrities on consumer-celebrity attachment and brand attachment.

Self-concept

Self-concept is defined as “totality of the individual's thoughts and feelings having reference to himself as an object” (Rosemberg 1979, p.7). In self-concept, actual-self refers to “how a person perceives herself” and ideal-self refers to “how a person would like to perceive herself” (Sirgy, 1982, p. 287). It is not clear which self is more salient in determining human behaviors. For example, in a social media context, research found that people only expressed the actual self (e.g., Facebook profile; Back, Stopfer, Vazire, Gaddis, Schmukle, Egloff and Gosling, 2010). Hollenbeck and Kaikati (2012), on the other hand, propose that people rarely represent their actual self on Facebook. The researchers discovered that participants chose to blend their actual and ideal self when these two aspects of self did not conflict with each other. Otherwise, participants blocked or enhanced the ideal self.

In regard to the role of self-concept in branding and purchase behaviors, research also examines the actual self and ideal self. While Sirgy (1982) asserts that consumers purchase products or brands in line with their self and self-esteem, Dolich (1969) proposes that this behavior might differ across private versus public consumption settings. There is consensus, however, that self-concept can be affected by different factors. For example, a high self-monitoring person is more likely to project themselves when consuming a specific brand which has similarities with themselves, while low self-monitoring people tend to hide their self in consumption. It's possible that low self-monitoring people tend to emphasize the private self and look for intrinsic congruence while high self-monitoring people care for the public self and collective self so that they seek both intrinsic and extrinsic congruence when choosing a brand or product (Hogg, Cox, and Keeling, 2000).

Malär, Krohmer, Hoyer and Nyffenegger (2011) propose that both actual and ideal self-congruence with a brand result in brand attachment. However, if a brand's personality matches the consumer's actual self, consumers generate more attachment to the brand. This effect is underpinned by construal level theory (Trope and Liberman, 2010) and suggests that actual self-congruence

outweighs ideal self-congruence. On the other hand, some researchers believe that the ideal self is an important facet in determining self enhancement, as consumers are motivated and inspired by celebrities they like (Choi and Rifon, 2012). The congruence of consumer's ideal self-image and a celebrity's image can positively lead to favorable advertisement, brand attitude and purchase intention (Choi and Rifon, 2012). Yet, it's unclear that which self is more important in affecting consumers' attitude toward brands. However—in line with Malär et al. (2011) and construal level theory, we propose that actual self is more likely to cause psychological proximity, while ideal self tends to cause psychological distance. The following section describes psychological distance in construal level theory. We predict that psychological distance mediates the relation between actual self / ideal self and consumer-celebrity attachment.

Construal Level Theory of psychological distance

Construal level theory proposes that people constitute different psychological distance with reference to the self in here and now (Trope and Liberman, 2010). If what a person encounters is more distant from the reference point, he or she will experience more psychological distance. Bar-Anan, Liberman, Trope and Algom (2007) tested a group of participants by offering them a set of words that were either psychologically proximal (e.g., “tomorrow”, “we”, “sure”) or psychologically distant (e.g., “year”, “others”, “maybe”). After viewing landscape photographs with an arrow indicating either a proximal or a distal point, the participants needed to respond as quickly and accurately as possible. The results demonstrated that psychological distance can be activated automatically when individuals encounter meaning representing proximity and distance in “spatial distance”, “temporal distance”, “social distance”, and “hypotheticality” (Bar-Anan, Liberman, Trope and Algom, 2007). Construal level theory was extended to the perception domain,

which suggests that psychological distance in time, space and social relation influences perceptual construal level (Liberman and Förster, 2009). Liberman and Förster (2009) tested the speed of participants' reaction to global letters versus local letters after exposing them to distant or proximal temporal, spatial, or social cues. The results revealed that the more proximal the temporal, spatial or social cues, the faster is the reaction to the global letters. This indicates that participants were more sensitive in identifying abstract stimuli. In line with the previous research, Trope and Liberman (2010) elucidate that construal level theory applies to time, space, social distance, and hypotheticality, such that if an object is moved away from direct experience, it is perceived at a higher construal level (abstract) compared with a proximal object (lower construal level). For example, in terms of social distance, people recall more concrete details for a friend rather than someone they have just known for one day. As social distance causes psychological distance (Bar-Anan, Liberman, Trope and Algom, 2007; Trope and Liberman, 2010), we might wonder what leads to social distance. Past research reveals that interpersonal similarity is perceived to be a form of social closeness (Miller, Downs and Prentice, 1998; Heider, 1958) and interpersonal similarity, which includes attitudes, personality characteristics, or background variables, enhances the perception of "belongingness" between two people (Heider, 1958). Additionally, researchers demonstrated that higher construal level of a social target is associated with less familiarity, leading to more social distance (Stephan, Liberman, Trope, 2011). Consistently, Liviatan, Trope and Liberman (2008) support that people use more superordinate or primary thinking for dissimilar subjects. They perceive similar subjects in a more subordinate or secondary way (low construal level), even though the amount of information is the same.

We propose that celebrities who represent a closer fit with consumers' actual self-image share more similarity with consumers. This evokes greater perceptions of familiarity and enables consumers to recall more details regarding the celebrities. In this case, it can be speculated that consumers feel

socially closer to the celebrities who have high actual self-congruence, which activates psychological proximity. However, compared with the actual self, the ideal self (i.e., who consumers would like to be) is further removed from what consumers actually are. In particular, if consumers feel the ideal image represented by a celebrity is difficult to achieve at present, they might not have concrete memory about the celebrities. Therefore, it is less likely that they feel psychologically close to the celebrity, although there is fit with consumers' ideal self-image. We predict that a higher extent of ideal self-congruence will increase psychological distance.

Hypothesis 1: Actual self-celebrity congruence is negatively related to psychological distance.

Hypothesis 2: Ideal self-celebrity congruence is positively related to psychological distance.

Consumer-Celebrity Attachment

Consumer-celebrity relationship can be viewed as an imaginary social relationship (Alperstein, 1991). Attachment has originally been discussed in a parent-infant relationship context, which explores how infants seek proximity from caregivers and secure protection (Bowlby, 2012). It refers to “the emotion-laden target-specific bond with a subject or an object” (Bowlby, 1982; Ilicic and Webster, 2011, p. 232).

The marketing literature explores attachment generally in the form of brand attachment. A plausible antecedent to brand attachment in a marketing communications context is the attachment consumers experience toward a celebrity endorsing a brand. To date, little research focused on the attachment between consumers and celebrities. We speculate that consumers who perceive different levels of psychological distance with regard to celebrities, develop different levels of

attachment toward these celebrities. If consumers feel psychological proximity with regard to a celebrities, it is probable that they can recall more concrete experiences about their exposure to celebrities, or the information they know about the celebrities. Thus, consumers are more likely to develop higher levels of emotional attachment based on these experiences and memories. However, if consumers feel psychologically distant with regard to celebrities, the attachment is more likely to be diminished, perceived relations do not develop as easily.

In regard to the role of psychological distance, Van Boven, Kane, McGraw and Dale (2010) propose that emotional intensity directly reduces psychological distance regardless of construal level. They asked participants to describe an experience of embarrassing moments emotionally or neutrally and directly measure psychological distance by asking how psychologically distant the participants perceived the embarrassing moment on two ten-point scales. The results showed that participants indicated more psychological distance in the emotionally embarrassing moment condition. This suggests that emotional intensity and psychological distance are related. We propose that the relation is bi-directional. Psychological distance can also affect emotions.

Kross and Ayduk (2008) conducted an experiment on how immersed perspective and self-distance perspective affect people's perception on depressed experience. The researchers found that when people use self-immersed perspective (reflecting in first person) to recall memories, they can access to the concrete emotions and experience (e.g., I went to a quiet place and cried for 1 hour.) and present higher level of depressed affect. In contrast, people who required to think in self-distance perspective focused more on construing the experience (e.g., I was glad I had already gone over it), which indicates less emotional distress (Kross and Ayduk, 2008). As we discussed above, psychological distance is also activated in perceptual level (Bar-Anan, Liberman, Trope and Algom, 2007), we believe that self- perception (self-immersed perspective and self-distance perspective) can also lead to psychological distance. If self-perception can cause different emotions,

we speculate that psychological distance can also result in emotions in the same way. As such, psychological distance affects consumers' ability to retrieve past experience, which cause different extent of emotions. When consumers have higher psychological distance, the strength of consumer-celebrity attachment can be diminished.

Hypothesis 3: Psychological distance is negatively related to consumer-celebrity attachment.

Brand Attachment

There is extensive research on how the fit between consumers' and brand personality contributes to the strength of consumer-brand relationship (Malär, Krohmer, Hoyer and Nyffenegger, 2011). Fournier (1998) holds that marketing actions shape a brand's traits and personality so that the brand is anthropomorphized and perceived as a relationship partner. The humanization of brands helps to build an interactive relationship between consumers and brands, and eventually increases brand attachment (Malär, Krohmer, Hoyer and Nyffenegger, 2011). Many factors affect brand attachment, however, for instance, brand attachment is related to the consumers' goals and the interaction between consumers and a brand (Park, MacInnis, and Priester, 2007). Additionally, symbolic and hedonic products are more likely to evoke attachment than functional products. Love and passion, self-connection (Thomson, MacInnis and Park, 2005), interdependence, commitment, intimacy and brand partner quality (Fournier, 1998) are important facets that constitute a relationship between consumers and a brand. A strong relationship between consumers and the brand gives rise to brand attachment.

Brand attachment has been conceptualized in a different way. Some research defines it in a more cognitive framework (Whan Park, MacInnis, Priester, Eisingerich and Iacobucci, 2010), while

others define it in an emotion-oriented framework (Thomson, MacInnis and Park, 2005). Brand attachment refers to “the strength of the bond connecting the brand with the self” (Park, MacInnis, Priester, Eisingerich and Iacobucci, 2010, p.2). It includes two dimensions: brand-self connection and brand prominence. Brand-self connection refers to the cognitive and emotional connection between self and the brand, which is an important aspect of brand attachment (Chaplin and John, 2005). Brand prominence refers to the salience of the cognitive and emotional connection between self and the brand, which will have a significant effect on consumer’s decision (Park, MacInnis, Priester, Eisingerich and Iacobucci, 2010). Thomson, MacInnis and Park (2005) emphasize the emotional aspect of brand attachment, which includes affection, passion, and connection.

We propose that brand attachment is associated with consumer- celebrity attachment. Previous findings suggest that a spokesperson activates secondary association to the brand (Till, Stanley, and Priluck, 2008). Research also found that celebrity endorsement is positively related to brand equity (Spry, Pappu and Cornwell, 2011). The meaning transfer model illustrates that a brand benefits from choosing celebrities who represent the features brand managers want to associate with the brand (McCracken, 1989). When consumers are exposed to a celebrity-brand pairing in marketing communications, consumers can draw meaning from celebrities and transfer it to the brand. Once the consumers have positive attitude toward the celebrities appearing in marketing communications, it is more likely that they develop more positive attitudes toward the brand. In this process, celebrity serves as an incentive to connect consumers and brands. Furthermore, research found that consumers feel more connected to the brand, if the brand shows more relatedness with consumers (Thomson, 2006). Celebrities play the role in consumers’ identification of commonalities between consumers and celebrities. Researchers also discovered that using multiple celebrities can increase the chance of purchase intention (Ilicic and Webster, 2011). When

consumers form attachment with celebrities, they also generate positive attitude toward advertisements and brands (Ilicic and Webster, 2011). We therefore hypothesize:

Hypothesis 4: Consumer-celebrity attachment is positively related to brand attachment.

Type of Celebrity

Past research shows that featuring a celebrity in commercials is better than not using a celebrity (Erdogan, 1999; Friedman, Termini, and Washington, 1976). Realizing the beneficial effect of celebrity, research has examined what type of celebrity is more effective in advertisements. Some researchers use fictitious spokespersons in experimental studies. This is based on the reasoning that fictitious celebrity is a better fit for products because the characteristics and appearance of the created celebrity are created based on the meaning the brand delivers. Real celebrities, on the other hand, may be incongruent with the brand in some circumstances, although they have social power to affect the consumers (Tom, Clark, Elmer, Grech, Masetti and Sandhar, 1992).

Friedman, Termini, and Washington (1976) examine the effectiveness of four types of endorsers: celebrities, typical consumers, professional experts, and company presidents. However, they failed to find any difference in effectiveness. Spry, Pappu, and Cornwell (2011) examine how celebrity credibility affected brand equity. In their experiment that was based on two Australian celebrities (local celebrities) from pretest results matched with global brands, the results were robust and showed an effect of celebrity credibility on brand equity. It shows that boosting a global brand does not necessarily require the engagement of a global celebrity.

Research to date has failed to examine a relatively new type of celebrity: social media celebrities. Social media celebrities, also called social media stars and social media influencers, refer to the

people who gained popularity based on social media. As consumers are increasingly involved with social media, social media celebrities (e.g., blogger, YouTuber, Instagrammer) leverage the platform to gain followers. They also start to engage in advertisement or other marketing activities, which make an influential impact on consumers' perception of brands. Research has noted the advantages of usage of social media celebrities. For instance, higher perceived trustworthiness of the blogger can result in more brand-related messages for readers. Once consumers recognize the trustworthiness of the celebrities, consumers' brand attitudes tend to be positive (Chu and Kamal, 2008). Similarly, blogger's recommendations have an impact on consumers' information search stage. The perceived usefulness of bloggers' recommendations and trust positively contribute to consumers' purchase intention. However, consumers put more weight on the trust dimension for bloggers with high reputation, while usefulness of the recommendation is more important for bloggers with low reputation (Hsu, Chuan-Chuan Lin and Chiang, 2013).

In reality, people like to tag someone, repost and leave comments to constitute the virtual relationship. As the majority of the followers in social media are those who they know in daily life, this back and forth interactions help to build up the relationship on a day to day base. Therefore, if we follow the social media celebrities, it's more likely that we will have the illusion that we know the celebrity as an acquaintance (Marwick, 2011). Marwick (2011) assert that both the well-known celebrities and social media celebrities are using social media platforms as a strategy to manage their self-presentation and interact with their fans. They deliberately present a favorable image to the public. That's why people care about the celebrity's authenticity and sincerity. However, well-known celebrities and social media celebrities are different in terms of the source of communication they deliver. According to Cohen (2009), the tweets sent from Britney Spears' account were written by herself, her manager, and others. Well-known celebrity are more likely to work with a PR team or their manager to release messages. In contrast, people who get popular based on their work

involving social media platforms, tend to convey their own personality and actual life, which consumers might consider more authentic.

Construal level theory proposes people perceive a similar celebrity in a low construal way, which means they are able to tell more concrete and details about this celebrity (Liviatan, Trope and Liberman, 2008). Social cognitive theory suggests that people learn from someone who they can highly identify with (Bandura, 1986). In line with this theory, when people perceive more similarities between the celebrity and their self, they are more likely to accept and adapt behaviors modeled by the celebrities (Basil, 1996). Therefore, it is easier for consumers to build connections with similar celebrities, and eventually feel attached to these celebrities. Discussing social media celebrities and well-known celebrities, this paper is based on the reasoning that the social media celebrities are perceived to have more similarities with consumers. We consider that well-known celebrities reflect more of consumers' "ideal self", while social media celebrities match consumers' "actual self" to a greater extent. Many social media celebrities post numerous and important aspects of their life on social media platforms, and interact with people online. Such interactions are likely to create less psychological distance between the celebrity and consumers. It is possible that consumers recall more information about social media celebrities based on similarities, which also decreases psychological distance. Additionally, a discrepancy between the ideal self and actual self leads to discomfort and negative emotion (Higgins, Klein, Strauman, 1985). Matching the actual self of consumers and a celebrity helps to reduce discrepancy and increase intimacy. Moreover, the presence of social media celebrities serves as a bridge between consumers and brands. They are more likely to elicit higher attachment between consumers and brands. Therefore, it is predicted that social media celebrities evoke higher actual self-celebrity congruence and psychological proximity, while well-known celebrities evoke higher ideal self-celebrity congruence and greater

psychological distance. Subsequently, social media celebrities are likely to increase consumer-celebrity attachment and brand attachment.

Hypothesis 5: Social media (vs. well-known) celebrity results in (a) higher actual self-celebrity congruence and (b) decreased psychological distance.

Hypothesis 6: Well-known (vs. social media) celebrity results in (a) higher ideal self-celebrity congruence and (b) greater psychological distance.

Hypothesis 7: Social media (vs. well-known) celebrity results in (a) higher consumer-celebrity attachment and (b) brand attachment.

Methodology

Two pretests and an experiment were conducted. The aim of pretest 1 was to generate a list of celebrities and test consumers' familiarity with brands considered for the main experiment. Pretest 2 served to determine the celebrities and the brands to be presented in the main experiment. The experiment examined H1-H7, which concerned the relations between self-congruence, psychological distance, consumer-celebrity attachment, and brand attachment.

Measures

We used empirically validated scales from the previous research.

In terms of the independent variable, self-congruence, we adapted the measures developed by Sirgy, Grewal, Mangleburg, Park, Chon, Claiborne and Berkman (1997) and Malär, Krohmer, Hoyer and Nyffenegger (2011). Sirgy, Grewal, Mangleburg, Park, Chon, Claiborne and Berkman (1997) criticized the method using discrepancy scores to measure the difference between self-image and product user image, and claimed this measure is fragmented and problematic. They suggested a more holistic measure. Subsequently, Malär, Krohmer, Hoyer and Nyffenegger (2011) used and adjusted their measure to assess measured the self-brand congruence. We included and adjusted the measurement by Sirgy, Grewal, Mangleburg, Park, Chon, Claiborne and Berkman (1997) and Malär, Krohmer, Hoyer and Nyffenegger (2011) for self-congruence in a seven-point Likert scale. Specifically, the participants were asked to think about the celebrity they like and describe the personality of the celebrity and their self. It gave a clear picture of the similarities and distinction of the celebrity and self. After that, they had to indicate the agreement and disagreement for four statements reflecting their actual self and ideal self (see Appendix). In a factor analysis, both of the items loaded on the same factor for actual self-congruence scale and ideal self-congruence scale. The measure for psychological distance was directly measured by one item asking how psychologically distant they perceived the celebrity in the ads, as Van Boven, Kane, McGraw and Dale (2010) did in their measurement. The psychological distance was assessed to know if it is functioned as the mediating role in the relations between self-congruence and celebrity-consumer relationship.

For consumer-celebrity attachment, the previous literature contends that separation distress is an important factor to indicate the strength of attachment (Berman and Sperling, 1994). It was measured by four items directly taken from Thomson (2006) on a seven-point scale (1= “strongly disagree” and 7 = “strongly agree”), for example, “I feel better if I am not away from or without XYZ for long periods of time” and “I miss XYZ when XYZ is not around”.

For the measurement of brand attachment, two measures that reflect the different aspect of brand attachment were included. One common measure is emotional brand attachment (Thomson, MacInnis and Park, 2005) which encompasses three dimensions: affection, passion and connection, with six items on a seven-point Likert Scale. The other measure was from Whan Park, MacInnis, Priester, Eisingerich and Iacobucci (2010), which includes two dimensions: brand-self connection (item 1: “To what extent is [Brand Name] part of you and who you are?” and item 2: “To what extent do you feel that you are personally connected to [Brand Name]?”) and brand prominence (item 1: “To what extent are your thoughts and feelings toward [Brand Name] often automatic, coming to mind seemingly on their own?” and item 2: “To what extent do your thoughts and feelings toward [Brand Name] come to you naturally and instantly?”).

Endorser credibility was measured by the scale of Ohanian (1990), encompassing aspects of attractiveness, expertise and trustworthiness. Expertise and trustworthiness dimensions are considered to be important in the source credibility model (Hovland and Weiss, 1951) and the attractiveness dimension plays an important role in the source attractiveness model (McGuire, 1969). Both were measured on seven-point semantic differential scales, which include 15 items (Appendix A). Congruence between brand and celebrity was a covariate measured on a seven-point semantic differential scale (Keller and Aaker (1992). All pretests and the main experiment concluded with demographic questions.

Process

Pretest 1

Participants were recruited by a research company to complete the survey with monetary incentive. Fifty Canadian participants over 18 years old were involved in the pretest. The pretest questionnaire consisted of three parts. In the first part, 25 participants were asked to list a name of social media celebrity they liked, while the other 25 participants listed a name of well-known celebrity they liked. The list generated by the participants enabled us to quantify the number of celebrity and measured the frequency. Subsequently, the participants filled out a measure of actual self-congruence and ideal self-congruence, as well as psychological distance. In the second part, participants rated familiarity with a list of five brands, and congruence between the celebrity and the brand. The five brands included in the pretest were L'Oréal, Nike, H&M, Coca Cola and Samsung. These brands were selected based on the 2015 Interbrand ranking which indicated that it is highly likely that consumers are familiar with these brands. The brands also covered different product categories (i.e., beauty, sport, fashion, retail and electronics). The final part of the pretest questionnaire included demographic questions regarding age, gender and status (e.g., students, self-employed), as gender and age might affect the perception of similarities between self and the celebrity (Basil, 1996; McCutcheon, Lange and Houran, 2002).

Forty-two out of fifty participants (84%) offered valid answers for analysis. In this sample, 33.3% were males and 66.7% were females. 50% were students, 42.9% were employees and 7.1% were in other status (e.g. self-employed, retired). The majority of the respondents were in the age range of 18-25 years old (59.5% for "18-25 years old", 23.8% for "26-33 years old", 14.3% for "33-41 years old" and 2.4% for "above 48"). Regarding their nationality, 81% were from Canada, 4.8% were from China, 4.8% were from Vietnam and the remainder were from Hong Kong (2.4%), India (2.4%), Mauritius (2.4%), and Morocco (2.4%).

The participants generated a list of names of seventeen social media celebrities and twenty well-known celebrities. The list of social media celebrities included Bethany Mota, Aspyn Ovard, Casey

Neistat, Cameron Dallas, DeStorm Power, Jeffree Star, Mamrie Hart, Gigi Gorgeous, Eva Gutowski, Huda Beauty, Jenna Marbles, Jazz Jennings, Zoella, Tyler Oakley, Michelle Phan, King Bach and Smosh. Ten (59%) were female celebrities and seven (41%) were male celebrities. The list of well-known celebrities included Andrew Garfield, Angelina Jolie, Brad Pitt, Cristiano Ronaldo, Elon Musk, Harrison Ford, Hugh Jackman, Jennifer Aniston, Jennifer Lawrence, Jimmy Fallon, Justin Bieber, Lana Del Rey, Lionel Messi, Rihanna, Ryan Reynolds, Sam Heughan, Taylor Swift, Tom Brady, Tom Hanks, and Wiz Khalifa. The names of social media celebrities are all different, while for well-known celebrities, Jennifer Aniston was repeated three times and Angelina Jolie, Jennifer Lawrence and Taylor Swift were repeated twice. Six (24%) were female celebrities and nineteen (76%) were male celebrities.

For brand familiarity (Are you familiar with [brand]? 1= not at all familiar, 7= very familiar), the results showed that all brands were high in familiarity. Coca Cola had the highest familiarity among participants (Coca Cola: mean=6.64, SD=.11; Samsung: mean = 6.00, SD=.23, L'Oréal: mean =5.86, SD=.21, Nike: mean =5.88, SD= .22, H&M: mean =5.86, SD=.27). Familiarity of Coca Cola was significantly different from L'Oréal, Nike, H&M and Samsung ($p < .05$).

Pretest 2

In a second pretest, twenty students from Concordia University (35% males and 65% females) were invited online to rate their familiarity with celebrities on a seven-point scale (Are you familiar with [celebrity]? 1= not at all familiar, 7= very familiar). This process offered the ranking of the relative familiarity of the celebrities. Considering the familiarity and previous endorsements of all the celebrities, we selected six well-known celebrities and six social media celebrities, with the greatest potential to fit the five brands. The selected well-known celebrities included Taylor Swift

(mean=5.00, SD=1.83), Justin Bieber (mean=4.80, SD=1.99), Cristiano Ronaldo (mean=4.70, SD=2.21), Rihanna (mean=4.60, SD=2.12), Jennifer Lawrence (mean=4.40, SD=1.17), Wiz Khalifa (mean=4.30, SD=1.57), and the selected social media celebrities included Jenna Marbles (mean=4.21, SD=2.82), Bethany Mota (mean=3.90, SD=2.08), Eva Gutowski (mean=3.40, SD=2.67), Cameron Dallas (mean=3.50, SD=2.51), Tyler Oakley (mean=3.30, SD=2.16), Casey Neistat (mean=3.21, SD=1.69).

The following process was aimed at selecting two brands that are congruent with the list of celebrities. Sixty participants (22% are “18-25 years old”, 26.33% are “26-33 years old”, 37.3% are “34-40 years old”; 49.2% males and 50.8% females) were asked to rate the familiarity with the celebrities on the one-item seven-point familiarity scale. Participants then rated celebrity-brand congruence (L’Oréal, Nike, H&M, Coca Cola and Samsung), unless they had indicated that they were not at all familiar with a celebrity. The measure of congruence (Keller and Aaker, 1992) included the items “fit”, “logical” and “appropriate” ($\alpha=.96$). We continued to analyze each celebrity-brand pair with regard to congruence. There were significant differences for well-known celebrity-brand pairs with regard to congruence ($p<.05$). For Taylor Swift, L’Oréal (mean=5.60, SD=1.73) had significantly higher fit than Nike (mean= 4.17, SD=2.15, $p=.00$) and Samsung (mean= 4.60, SD=2.11, $p=.01$). Nike (mean= 4.17, SD=2.15) had significantly lower fit than Coca Cola (mean= 5.07, SD=1.94, $p=.01$), L’Oréal (mean=5.60, SD=1.73, $p=.00$) and H&M (mean=5.12, SD=1.89, $p=.01$). For Rihanna, Nike (mean= 4.41, SD=1.95) had significantly lower fit than Coca Cola (mean= 5.10, SD=1.87, $p=.04$), L’Oréal (mean=5.44, SD=1.68, $p=.00$) and H&M (mean=5.17, SD=1.68, $p=.03$). Samsung (mean=4.46, SD=1.99) had significantly lower fit than L’Oréal (mean=5.44, SD=1.68, $p=.00$) and H&M (mean=5.17, SD=1.68, $p=.04$). For Jennifer Lawrence, L’Oréal (mean=5.65, SD=1.53) had significantly higher fit than Coca Cola (mean=4.96, SD=1.78, $p=.04$), H&M (mean=5.09, SD=1.74, $p=.00$), Nike (mean=4.49, SD=1.79, $p=.09$) and Samsung

(mean=4.56, SD=1.92, $p=.00$). The rest of the brands did not have any difference. For Justin Bieber, L'Oréal (mean= 3.05, SD=2.12) had significantly lower fit than the rest of the brands. For Wiz Khalifa, L'Oréal (mean=2.63, SD=1.96) had significantly lower fit than the rest of the brands as well. For Cristiano Ronaldo, Nike had significantly higher fit (mean=5.71, SD=1.69) than the rest of the brands. Coca Cola (mean=4.77, SD=2.08) had significantly higher fit than L'Oréal (mean=3.35, SD=1.87, $p=.00$) and H&M (mean=3.92, SD=2.21, $p=.04$). L'Oréal had significantly lower fit (mean=3.35, SD=1.87) than the rest of the brands (see table 1 for mean; see table 3 for multiple comparisons). However, for social media celebrities, there were not significant differences in congruence with any of the five brands ($p>.05$).

We also reviewed brand-celebrities pair with regard to congruence. Multiple comparisons indicated that comparing celebrities with Coca Cola, Wiz Khalifa (mean=4.13, SD=2.03) had significant less congruence than Taylor Swift (mean=5.07, SD=1.94, $p=.02$), Rihanna (mean=5.10, SD=1.87, $p=.01$) and Jennifer Lawrence (mean=4.96, SD=1.78, $p=.03$). Justin Bieber (mean=4.36, SD=2.28) had significant less congruence than Rihanna (mean=5.10, SD=1.87, $p=.04$). However, for Samsung, there was no significant difference across celebrities ($p>.05$). For Nike, Cristiano Ronaldo (mean=5.71, SD=1.69) had significant higher congruence than other celebrities ($M_{other\ celebrities} < 5$, $p<.05$). For L'Oréal, female celebrities (Mean >4) were significantly more congruent than male celebrities (Mean <4, $p<.05$). For H&M, three male well-known celebrities had significantly lower congruence (Mean <4, $p<.05$) than other celebrities (Mean >4).

L'Oréal and H&M were not selected for the main experiment, as L'Oréal showed gender differences, and H&M had significant differences with regard to the three male well-known celebrities. Samsung was considered as the first brand, as there was no significantly higher or lower congruence across any of the celebrities. Moreover, Samsung did not show any difference with Coca Cola or Nike in celebrity-brand pair comparisons.

As Coca Cola showed significantly higher familiarity than other brands in the first pretest, Nike and Samsung were chosen for inclusion in the main experiment. Both of the two brands did not show significant differences (i.e., significantly higher or lower congruence) for each celebrity (except for the Nike-Cristiano Ronaldo pair, which was not included in the main experiment), and there was no difference for congruence across the two brands.

Main experiment

For the main experiment, two hundred and seventy participants were recruited in an online survey administered to a consumer panel. We screened out ten surveys in terms of incomplete answers. Data of two hundred and sixty participants (148 females (56.92%), 112 males (43.08%); average age=25.51; 38.85% students, 53.46% employees, 7.69% others) was included in the analysis. Participants were randomly assigned in one of three conditions (no celebrity condition (control group), social media celebrity condition, and well-known celebrity condition). They were asked to indicate their familiarity with a list of either social media celebrities (social media celebrity condition) or well-known celebrities (well-known celebrity condition) on a one-item seven-point bipolar adjective scale (Are you familiar with [celebrity]? 1= not at all familiar, 7= very familiar). One of the celebrities who received a familiarity score greater than 3 was randomly presented in the following section of the questionnaire. Participants who rated all celebrities with a familiarity score below 3 were assigned to the control group. Next, participants completed measures of actual/ideal self-celebrity congruence (in the celebrity conditions), psychological distance, and consumer-celebrity attachment. Additionally, they responded to questions related to celebrity credibility, as a control measure. Next, participants saw a description illustrating the partnership between a brand (Samsung/Nike) and a celebrity [In the summer of 2016, (Samsung/Nike) partnered with [a social media celebrity/a well-known celebrity] for a marketing campaign. After

that, they saw an image featuring the celebrity, a brand logo, and a slogan. The format and layout were identical in all conditions. For the control group, the image was identical but did not include the celebrity. After viewing the material, participants rated brand attachment to either Samsung or Nike. The questionnaire concluded with demographic questions regarding age, gender, and status (e.g., students, self-employed).

Results

As the participants who rated familiarity below 3 was assigned to the control group, there was no difference of celebrity familiarity between the social media celebrity condition (mean=5.72, SD=1.24) and the well-known celebrity condition (mean=5.43, SD=1.16) ($t(182) = 1.59, p = .11$) (Table 1).

In terms of the congruence with Samsung, we did not find the significant difference between the social media celebrity condition (mean=4.72, SD=1.69) and the well-known celebrity condition (mean=4.48, SD=1.56) ($t(90) = .73, p = .47$) (see table 3&4). Similarly, for the congruence with Nike, no significant difference was shown between the social media celebrity condition (mean=4.34, SD=1.50) and the well-known celebrity condition (mean=4.04, SD=1.88) ($t(90) = .84, p = .40$) (Table 1).

The measure of celebrity credibility demonstrated a good internal validity for attractiveness ($\alpha = .91$), expertise ($\alpha = .96$) and trustworthiness ($\alpha = .95$). The results did not demonstrate a significant difference between the social media celebrity condition and the well-known celebrity condition in attractiveness ($t(182) = -.41, p = .10$), expertise ($t(182) = 1.44, p = .15$), and trustworthiness ($t(182) = 1.78, p = .08$), even though social media celebrities were rated higher scores in expertise ($M_{social\ media\ celebrity} = 4.54, SD = 1.69$; $M_{well-known\ celebrity} = 4.16, SD = 1.86$) and trustworthiness

($M_{social\ media\ celebrity}=4.62$, $SD=1.69$; $M_{well-known\ celebrity}=4.16$, $SD=1.83$) than well-known celebrities (Table 1).

Table 1. The difference between social media celebrity vs. well-known celebrity on familiarity, congruence and three dimensions of celebrity credibility

	Endorser Type	N	Mean	Standard Deviation	t	df	p
Familiarity	Social media celebrity	92	5.43	1.16	1.59	182	.11
	Well-known celebrity	92	5.72	1.24			
Congruence (Samsung)	Social media celebrity	45	4.72	1.69	.73	90	.47
	Well-known celebrity	45	4.48	1.56			
Congruence (Nike)	Social media celebrity	45	4.34	1.50	.84	90	.40
	Well-known celebrity	45	4.04	1.88			
Attractive	Social media celebrity	92	4.32	1.66	-.41	182	.69
	Well-known celebrity	92	4.42	1.75			
Expertise	Social media celebrity	92	4.54	1.69	1.44	182	.15
	Well-known celebrity	92	4.16	1.86			
Trustworthiness	Social media celebrity	92	4.62	1.69	1.78	182	.08
	Well-known celebrity	92	4.16	1.93			

Hypothesis 1-4

Actual self-congruence ($\alpha=.92$) and ideal self-congruence ($\alpha=.93$) had two items respectively loaded on the factor, and both of the measures presented high internal validity. The results indicated that actual self-congruence had a negative effect on psychological distance ($\beta = -.35$, $p = .00$), which confirmed H1 (Table 2). However, ideal self-congruence was shown negatively related to psychological distance ($\beta = -.46$, $p = .00$), which was opposite with the prediction. Thus, H2 was not supported (Table 2).

Successful factor loading was observed for consumer-celebrity attachment. Four items loaded on the same dimension of consumer-celebrity attachment and reliability of the scale was high ($\alpha=.91$).

The results proved that psychological distance had negative effect on consumer-celebrity attachment ($\beta = -.25$, $p = .00$). Thus, H3 was supported (Table 2).

Table 2. Coefficient table

IV	DV	β	p
Actual self-congruence	Psychological distance	-.35	.00
Ideal self-congruence	Psychological distance	-.46	.00
Psychological distance	Consumer-celebrity attachment	-.25	.00
Consumer-celebrity attachment	Brand-self connection	.39	.00
Consumer-celebrity attachment	Brand prominence	.26	.00
Consumer-celebrity attachment	Emotional brand attachment	.39	.00

We further examined the mediating role of psychological distance in the relationship between actual self-congruence / ideal self-congruence and consumer-celebrity attachment. The method used was from Baron & Kenny methods (1986). The first step was to calculate the direct effect of actual self-congruence on consumer-celebrity attachment. The results indicated significant direct effect ($\beta = .56$, $p = .00$). Step two was to test the direct effect of actual self-congruence on psychological distance and step three was to test the direct effect of psychological distance on consumer-celebrity attachment, which was confirmed in H1 ($\beta = -.35$, $p = .00$) and H3 ($\beta = -.25$, $p = .00$). Step four was to test full mediation of psychological distance. However, the results showed that the direct effect of actual self-congruence on consumer-celebrity attachment was still significant ($\beta = .38$, $p = .00$) when psychological distance was controlled ($\beta = -.11$, $p = .19$). As step one to three were approved, the finding supported partial mediation of psychological distance in the effect of actual self-congruence on consumer-celebrity attachment (Table 3).

Table 3. Mediation of psychological distance in the effect of actual self-congruence on consumer-celebrity attachment

		path	β	p
step 1	actual self-congruence → consumer-celebrity attachment	path c	.56	.00
step 2	actual self-congruence → psychological distance	path a	-.35	.00
step 3	psychological distance → consumer-celebrity attachment	path b	-.25	.00
step 4	actual self-congruence and psychological distance → consumer-celebrity attachment	path c'	.38	.00
		path b	-.11	.19

We replicated the analysis of psychological distance in the effect of ideal self-congruence on consumer-celebrity attachment. The results indicated a significant effect of ideal self-congruence on consumer-celebrity attachment ($\beta = .53$, $p = .00$), a significant effect of ideal self-congruence on psychological distance ($\beta = -.46$, $p = .00$) and a significant effect of psychological distance on consumer-celebrity attachment ($\beta = -.25$, $p = .00$). However, the direct effect of ideal self-congruence on consumer-celebrity attachment was still significant ($\beta = .56$, $p = .00$) when psychological distance was controlled ($\beta = .07$, $p = .39$). Thus, it reflected partial mediation of psychological distance in the effect of actual self-congruence on consumer-celebrity attachment (Table 4).

Table 4. Mediation of psychological distance in the effect of ideal self-congruence on consumer-celebrity attachment

		path	β	p
step 1	ideal self-congruence → consumer-celebrity attachment	path c	.53	.00
step 2	ideal self-congruence → psychological distance	path a	-.46	.00

step 3	psychological distance → consumer- celebrity attachment	path b	-.25	.00
step 4	ideal self-congruence and psychological distance→ consumer-celebrity attachment	path c'	.56	.00
		path b	.07	.39

We attempted to measure brand attachment with two scales. The first measure was from Whan Park, MacInnis, Priester, Eisingerich and Iacobucci (2010), which includes two indicators: brand-self connection and brand prominence. Factor analysis showed all the items loaded on two components and reliability was high (brand-self connection ($\alpha = .96$) and brand prominence ($\alpha = .95$)) (Table 5). The other measure, emotional brand attachment, was from Thomson, MacInnis and Park (2005). Based on the factor analysis, all items loaded on one component. The correlation between items was high ($r > .70$). KMO was greater than .5 (.89) and Bartlett's test was significant ($p = .00$). Total variance explained by one component was high (81.72%). Moreover, it indicated a good internal consistency ($\alpha = .96$) (Table 5). Therefore, we decided to use the single measure of emotional brand attachment by calculating the mean of six items in the scale of emotional brand attachment.

Table 5. Reliability table

scale	Cronbach's Alpha
Celebrity credibility	
Attractive	.91
Expertise	.96
Trustworthiness	.95
Congruence	.92
Actual self-congruence	.92
Ideal self-congruence	.93
Consumer-celebrity attachment	.91
Brand attachment	
Brand self-connection	.95
Brand prominence	.93
Emotional brand attachment	.96

Multiple comparisons of brand attachment were conducted to examine the brand effect (Samsung vs. Nike) among the social media celebrity condition, the well-known celebrity condition and the control group. The outcome indicated that there was no significant difference of using Samsung or Nike in group comparisons ($p > .05$). We further examined if these two brand affected the perception of brand- celebrity congruence. The findings indicated no significant difference in brand-celebrity congruence when using Samsung (mean=4.41, SD=1.66) or Nike (mean=4.68, SD=1.58) ($t(64) = -.64, p = .52$) in the social media celebrity condition. Additionally, no significant difference of brand-celebrity congruence ($t(64) = -.48, p = .63$) was found in the well-known celebrity condition when using Samsung (mean=4.19, SD=1.58) or Nike (mean=4.41, SD=1.90). Therefore, we combined the data from two brands for the following analysis.

The results indicated that consumer-celebrity attachment had a positive effect on brand-self connection ($\alpha = .39, p = .00$) and brand prominence ($\alpha = .26, p = .00$) in the scale of brand attachment. The measure of emotional brand attachment also indicated a consistent result. The positive effect of consumer-celebrity attachment on emotional brand attachment was significant ($\alpha = .39, p = .00$). Therefore, H4 was supported (Table 2).

Hypothesis 5-7

In the following part, the effect of using social media celebrities and well-known celebrities was examined. The results showed that participants perceived significantly greater actual self-congruence with social media celebrities (mean=3.66, SD=1.73) than well-known celebrities (mean=3.04, SD=1.80) ($t(182) = 2.38, p = .02$). However, no significant difference was observed for ideal self-congruence when using social media celebrities (mean=3.68, SD=1.75) or well-known celebrities (mean=3.48, SD=2.04) ($t(177.84) = .33, p = .47$). The comparison of two types of

celebrities also indicated that participants perceived significantly higher distance (mean=4.89, SD=1.73) with well-known celebrities than with social media celebrities (mean=4.32, SD=1.65; $t(182) = -1.78, p = .02$). Therefore, H5 and H6 (b) were supported (Table 6). Regarding consumer-celebrity attachment, though participants rated higher scores of attachment with social media celebrities (mean=3.27, SD=1.97) than well-known celebrities (mean =2.98, SD=1.74), the difference was not significant ($t(182) = 1.08, p = .28$). Thus, H7 (a) was not confirmed (Table 6).

Table 6. The difference between social media celebrity vs. well-known celebrity on actual self-congruence, ideal self-congruence, psychological distance and consumer-celebrity attachment

	Endorser Type	Mean	Standard Deviation	t	df	p
Actual self-congruence	Social media celebrity	3.66	1.73	2.38	182	.02
	Well-known celebrity	3.04	1.80			
Ideal self-congruence	Social media celebrity	3.68	1.75	.72	182	.42
	Well-known celebrity	3.48	2.04			
Psychological distance	Social media celebrity	4.32	1.65	-2.31	182	.02
	Well-known celebrity	4.89	1.73			
Consumer-celebrity attachment	Social media celebrity	3.27	1.97	1.08	182	.28
	Well-known celebrity	2.98	1.74			

Note: N = 92

In terms of brand attachment, the results indicated lower brand-self connection in the control group, compared with the social media celebrity condition (mean=4.11, SD=1.65, $p = .00$) and the well-known celebrity condition (mean=3.81, SD=1.83, $p = .03$). However, there was no difference of using social media celebrities and well-known celebrities for brand-self connection ($p = .25$). Regarding brand prominence, social media celebrity condition (mean=4.49, SD=1.71) was not different from well-known celebrity condition (mean=4.33, SD=1.61, $p = .25$). Both of social media celebrity condition ($p = .00$) and well-known celebrity condition ($p = .01$) indicated higher brand

prominence than the control group (mean=3.58, SD=1.84) (Table 7). Therefore, these two indicators (brand-self connection and brand prominence) showed that there was no difference of brand attachment when presenting social media celebrities or well-known celebrities to participants. Thus, 7 (b) was not confirmed.

In terms of emotional brand attachment, participants were more emotionally attached to social media celebrity celebrities (mean=4.34, SD=1.76) than to well-known celebrities (mean=3.76, SD=1.67, $p=.03$) and without celebrities (mean=3.39, SD=1.93, $p=.00$). However, presenting well-known celebrities in an advertisement did not show a difference with presenting no celebrities in an advertisement ($p=.19$) (Table 7). In this case, 7 (b) was confirmed.

The results of two scales measuring the cognitive and emotion aspect of brand attachment were inconsistent. We noticed that participants perceived higher cognitive brand attachment with well-known celebrities compared with social media celebrities, thus it did not cause a significant difference between social media celebrity condition and well-known celebrity condition. However, participants perceived low emotional attachment with well-known celebrities, which led to the significant difference of emotional aspect of brand attachment between the social media celebrity condition and the well-known celebrity condition. We contend that because emotional brand attachment includes other emotions besides connection, such as passion and affection, it's possible to decrease participants' overall emotion toward the brand when using well-known celebrities (vs. social media celebrities). For the items such as passion and affection, they indeed contributed a significant difference between the social media celebrity condition and the well-known celebrity condition. But for connection, the two conditions did not show a significant difference, which was consistent with brand attachment measure. We might speculate that when emotional brand attachment involves more emotions other than connection in the scale, the difference between social media celebrity condition and well-known celebrity condition would be widened.

Table 7. The difference between social media celebrity vs. well-known celebrity on brand self-connection, brand prominence and emotional brand attachment

Measure	Endorser Type	Endorser Type	Sig.
Brand self-connection	Social media celebrity (mean=4.11, SD=1.65)	Well-known celebrity	.25
		Control group	.00
	Well-known celebrity (mean=3.81, SD=1.83)	Social media celebrity	.25
		Control group	.03
	Control group (mean=3.22, SD=1.87)	Social media celebrity	.00
		Well-known celebrity	.03
Brand prominence	Social media celebrity (mean=4.49, SD=1.71)	Well-known celebrity	.52
		Control group	.00
	Well-known celebrity (mean=4.33, SD=1.61)	Social media celebrity	.52
		Control group	.01
	Control group (mean=3.58, SD=1.84)	Social media celebrity	.00
		Well-known celebrity	.01
Emotional brand attachment	Social media celebrity (mean=4.34, SD=1.76)	Well-known celebrity	.03
		Control group	.00
	Well-known celebrity (mean=3.76, SD=1.67)	Social media celebrity	.03
		Control group	.19
	Control group (mean=3.39, SD=1.93)	Social media celebrity	.00
		Well-known celebrity	.19

The subsequent finding showed that, in the social media celebrity condition, psychological distance did not relate to emotional brand attachment ($\beta=-.17$, $p=.13$). However, actual self-congruence had a positive effect on emotional brand attachment ($\beta= .35$, $p=.00$). In the well-

known celebrity condition, psychological distance had negative effect on emotional brand attachment ($\beta=-.22$, $p=.03$). Moreover, actual self- congruence had a positive effect on emotional brand attachment ($\beta= .41$, $p=.00$) (Table 8). Even though in the social media celebrity condition, psychological distance did not show an effect on emotional brand attachment, highlighting actual self-congruence had a positive effect on emotional brand attachment. Nevertheless, for well-known celebrities, the greater actual self-congruence and decreased psychological distance help to create more emotional brand attachment.

Table 8- Effect of psychological distance/ actual self-congruence on emotional brand attachment

condition	IV	DV	β	p
social media celebrity	psychological distance	emotional brand attachment	-.17	.13
	actual self-congruence	emotional brand attachment	.35	.00
well-known celebrity	psychological distance	emotional brand attachment	-.22	.03
	actual self-congruence	emotional brand attachment	.41	.00

Table 9. Gender difference in evaluating all the measured variables

	Gender	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
ideal self-congruence	female	104	3.78	1.92	1.59	182	.11
	male	80	3.33	1.86			
actual self-congruence	female	104	3.47	1.76	1.02	182	.31
	male	80	3.19	1.83			
psychological distance	female	104	4.37	1.62	-2.18	182	.03
	male	80	4.91	1.78			
consumer-celebrity attachment	female	104	3.36	1.90	1.94	182	.05
	male	80	2.83	1.78			
brand self-connection	female	148	3.99	1.80	2.56	258	.01
	male	112	3.42	1.78			
brand prominence	female	148	4.21	1.74	.42	258	.67
	male	112	4.12	1.77			
emotional brand attachment	female	148	4.09	1.78	2.4	258	.02
	male	112	3.55	1.82			

We also examined the gender effect in participants' perception. The findings suggested that women felt psychologically closer to the celebrities than men. Moreover, women rated higher brand self-connection and emotional brand attachment than men (Table 9). It seems that women are more likely to build up connection and other emotions when celebrities are featured in an advertisement.

Conclusion

Discussion

Examining the relations among consumers, celebrities and brands, the previous literatures mainly focused on associations between celebrities and brands (Spry, Pappu, and Cornwell, 2011; Till, Stanley and Priluck, 2008), consumers' attitude to and perceptions of celebrity endorsement (Ilicic and Webster, 2013), or consumers' attachment to brands (Malär, Krohmer, Hoyer and Nyffenegger, 2011). However, no research to date has fully explained the role of celebrity type in the relation involving consumers, celebrities, and brands. Additionally, although social media celebrities gain more influence, research has not examined their impact on consumer responses to brands.

This paper aims to reveal how consumers develop self-perceptions contingent upon celebrity type, form attachment with these celebrities, and eventually develop brand attachment. As the previous research mainly included well-known celebrities, this paper seeks to expand the literature by showing that social media celebrities can also give rise to strong attachment with consumers and ultimately affect brand attachment. Moreover, prior research has shown that actual self-congruence outweighs ideal self-congruence in some circumstances (Back, Stopfer, Vazire, Gaddis, Schmukle, Egloff and Gosling, 2010; Malär, Krohmer, Hoyer and Nyffenegger, 2011). We predicted that this pattern happens because actual self-congruence diminishes psychological distance, whereas ideal

self-congruence increases psychological distance. Our findings show that there is a negative effect of actual self-congruence on psychological distance. However, we also found a negative effect of ideal self-congruence on psychological distance. This suggests that consumers feel less psychological distance when they find that their ideal self-image is more congruent with celebrities associated with brands. One possible explanation is that because high ideal self can result in high self-esteem, consumers are more inclined to feel close to the celebrities that help to boost their ideal self (Sirgy, 1985). As such, actual self-congruence helps to maintain self-consistency, whereas ideal self-congruence relates to self-esteem motives. When positive actual self-congruence matches positive ideal self-congruence, there is no internal conflict. In this case, ideal self-concept congruence will not increase psychological distance, as increased self-esteem reinforces self-consistency (Sirgy, 1985).

Our findings supported a negative effect of psychological distance on consumer-celebrity attachment. Moreover, we found that actual self-congruence and ideal self-congruence were positively related to consumer-celebrity attachment. The relation was partially mediated by psychological distance. Furthermore, consumer-celebrity attachment had a positive influence on brand attachment. Taken together, these results emphasize that psychological distance plays an important role in the association of self, celebrities, and brands.

In terms of the effect of social media celebrities and well-known celebrities, findings suggest that social media celebrities were linked to higher actual self-congruence and lower psychological distance compared to well-known celebrities. However, there was no difference in consumers' perceptions of ideal self-congruence between the two types of celebrities. The results further supported that using social media celebrities in advertisement increased consumer-celebrity attachment and emotional brand attachment. When social media celebrities were included in the advertisement, consumers tended to feel close to the social media celebrities and generate more

attachment to the celerity and the brand. The results did not support a direct effect of psychological distance on emotional brand attachment. They highlight, however, that actual self-congruence with a celebrity indeed contributes to emotional brand attachment.

Managerial Implication

When companies attempt to promote their brands, they can consider working with celebrities to increase consumers' attachment to brands. The current research suggests that the perceived congruence between consumers' actual and ideal self and the celebrity featured in the advertisement matters. Greater actual self-congruence and ideal self-congruence contribute to less psychological distance. Once psychological distance is decreased, consumers tend to form greater attachment to both celebrities and brands. Compared to well-known celebrities, consumers perceive higher actual self-congruence with social media celebrities. When it comes to brand attachment, social media celebrities can elicit greater emotional brand attachment. The implication is that if the brand encourages consumers to embrace their original self and increase their self-confidence, working with social media celebrities might be a preferred option to tap into consumers' actual self. However, if the brand is more inclined to encourage consumers to pursue an ideal self, it does not matter whether the brand employs social media celebrities or well-known celebrities in its communication strategy. Nonetheless, working with social media celebrities evoke more emotions linked to brand attachment rather than only cognitive connections.

Overall, this research suggests that partnerships with social media celebrities can be considered as a cost-effective strategy for marketing campaign. The results suggest that women tend to be more affected in terms of emotional dimensions (e.g., psychological distance and emotional brand

attachment) than men. The brands that target on female consumers could add some emotional elements in an advertisement to increase favorable perceptions of and responses to brands.

It is important to point out, however, that the effect of social media celebrities is dependent on the consumers' familiarity with them. Therefore, when using social media celebrities, it is advisable to select multiple celebrities or ensure that the target market is familiar with the social media celebrity selected for a campaign. Alternatively, companies should consider well-known celebrity to ensure that there are pre-existing positive associations consumers can transfer to the brand.

Limitation and Future Research

There are a few limitations that need to be acknowledged. First, age and gender of the celebrities included in this research might have a confounding effect. The average age of the well-known celebrities included in this experiment is higher than that of the social media celebrities. Moreover, the age of the participants was closer to the age of social media celebrities. It is unknown whether celebrity age and consumer-celebrity age similarity affect participants' perception of actual self and ideal self-congruence as well as psychological distance. In addition, male and female participants showed significant differences in the evaluation of psychological distance, brand self-connection, and emotional brand attachment. The findings suggest that women are more easily affected by the use of celebrities in advertisements compared to men. Furthermore, the celebrities presented to the participants were not gender-matched (i.e., their sex did not necessarily match that of the participant due to random assignment). The results are thus not conclusive with regard to a potential difference in the perception of actual self and ideal self-congruence based on a gender-match of the celebrity used in the experiment. Future research could investigate the influence of a (mis)match of age/gender of participants and age/gender of celebrities to shed more light on age

and gender effects in consumers' evaluation of self-congruence and attachment to celebrities and brands.

Second, we did not choose brands that had extremely high or low congruence but chose two brands with moderate congruence with the celebrities. We found, however, that the brand L'Oréal, presented higher congruence with female celebrities, while H&M was more congruent with young celebrities. Therefore, the results might not be generalizable to brands with a greater fit with a specific gender or target groups. Future research can replicate the experiment in different products or brands to further explore the effect of celebrity endorsements on consumers and brands.

There are other possibilities for future research. For example, individual differences are potential moderators. The previous literature provides evidence that not all consumers are influenced by brand personality (Swaminathan, Stilley and Ahluwalia, 2009). Similarly, not all consumers are similarly sensitive to celebrities featured in advertisements or consider self-congruence with celebrities. For example, high self-monitoring people are more concerned about social cues and self-presentation (Snyder, 1974). When they consume public brands, they are more likely to think about image congruence and care about whether brand image fits with their self-image (Graeff, 1996). However, low self-monitoring people emphasize functional attributes or product features to a greater extent (Graeff, 1996). They are less likely to evaluate brands based on congruence. By investigating individual differences, future research on celebrity endorsements can help the companies make better decision catering to their consumers. Similarly, involvement, self-esteem, and public self-consciousness are factors that may affect attachment, which would have positive effect on the influence of actual self-congruence on brand attachment (Malär, Krohmer, Hoyer and Nyffenegger, 2011). Lastly, as most of companies attempt to partner with more than one celebrity, future research can examine the effect of multiple celebrities on consumers' perception of fit with self-concept. It is possible that consumers can identify to a greater extent with some (but not all)

celebrities a brand associates itself with. Future research can also examine how social media celebrities affect downstream consequences, such as consumers' purchase intention and decisions. Undoubtedly, the social media celebrities present an opportunity to increase engagement with and the number of followers of a brand, but whether they indeed influence consumers' purchase behaviour remains unknown.

Bibliography

Alperstein, N. M. (1991). Imaginary social relationships with celebrities appearing in television commercials. *Journal of Broadcasting & Electronic Media*, 35(1), 43-58.

Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., & Gosling, S. D. (2010). Facebook Profiles Reflect Actual Personality, Not Self-Idealization. *Psychological Science* (0956-7976), 21(3), 372-374.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.

Bar-Anan, Y., Liberman, N., Trope, Y., & Algom, D. (2007). Automatic processing of psychological distance: evidence from a Stroop task. *Journal of Experimental Psychology: General*, 136(4), 610.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.

Basil, M. D. (1996). Identification as a mediator of celebrity effects. *Journal of Broadcasting & Electronic Media*, 40(4), 478-495.

Berman, W. H., & Sperling, M. B. (1994). The structure and function of adult attachment. *Attachment in adults: Clinical and developmental perspectives*, 9(2), 3-28.

Bowlby, J. (1982). Attachment and loss: retrospect and prospect. *American journal of Orthopsychiatry*, 52(4), 664.

Bowlby, J. (2012). *The making and breaking of affectional bonds*. Routledge.

Brian D., T., & Till, B. D. (1998). Using celebrity endorsers effectively: lessons from associative learning. *Journal of Product & Brand Management*, 7(5), 400.

Chaplin, L. N., & John, D. R. (2005). The development of self-brand connections in children and adolescents. *Journal of Consumer Research*, 32(1), 119-129.

Choi, S. M., & Rifon, N. J. (2012). It is a match: The impact of congruence between celebrity image and consumer ideal self on endorsement effectiveness. *Psychology & Marketing*, 29(9), 639-650.

Chu, S. C., & Kamal, S. (2008). The effect of perceived blogger credibility and argument quality on message elaboration and brand attitudes: An exploratory study. *Journal of Interactive Advertising*, 8(2), 26-37.

Cohen N (2009). When stars Twitter, a ghost may be lurking, *The New York Times*, 26 March. Retrieved from <http://www.nytimes.com/2009/03/27/technology/internet/27twitter.html>

Dolich, I. J. (1969). Congruence relationships between self images and product brands. *Journal of Marketing Research*, 6(1), 80-84.

Erdogan, B. Z. (1999). Celebrity endorsement: A literature review. *Journal of marketing management*, 15(4), 291-314.

Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of consumer research*, 24(4), 343-353.

Friedman, H. H., Termini, S., & Washington, R. (1976). The effectiveness of advertisements utilizing four types of endorsers. *Journal of advertising*, 5(3), 22-24.

Frijda, N. H. (1992). The empirical status of the laws of emotion. *Cognition and Emotion*, 6(6), 467-477.

Graeff, T. R. (1996). Image congruence effects on product evaluations: the role of self-monitoring and public/private consumption. *Psychology & Marketing*, 13(5), 481-499.

Griffith, E. (2015). YouTube star Michelle Phan's beauty startup Ipsy raises \$100 million. Retrieved from <http://fortune.com/2015/09/14/ipsy-glam-bag-michelle-phan-funding/>

- Heider, F. (1958). *The psychology of interpersonal relations*. Oxford: Wiley
- Higgins, E. T., Klein, R., & Strauman, T. (1985). Self-concept discrepancy theory: A psychological model for distinguishing among different aspects of depression and anxiety. *Social cognition*, 3(1), 51-76.
- Hogg, M. K., Cox, A. J., & Keeling, K. (2000). The impact of self-monitoring on image congruence and product/brand evaluation. *European Journal of Marketing*, 34(5/6), 641-667.
- Hollenbeck, C. R., & Kaikati, A. M. (2012). Consumers' use of brands to reflect their actual and ideal selves on Facebook. *International Journal of Research in Marketing*, 29(4), 395-405.
- Hovland, C. I., & Weiss, W. (1951). The influence of source credibility on communication effectiveness. *Public opinion quarterly*, 15(4), 635-650.
- Hsu, C. L., Chuan-Chuan Lin, J., & Chiang, H. S. (2013). The effects of blogger recommendations on customers' online shopping intentions. *Internet Research*, 23(1), 69-88.
- Ilicic, J., & Webster, C. M. (2011). Effects of multiple endorsements and consumer-celebrity attachment on attitude and purchase intention. *Australasian Marketing Journal (AMJ)*, 19(4), 230-237.
- Ilicic, J., & Webster, C. M. (2013). Celebrity co-branding partners as irrelevant brand information in advertisements. *Journal of Business Research*, 66(7), 941-947.
- Johnson, L. (2015). Social Stars Spread Some Holiday Cheer. *Adweek*, 56(2), 10-11.
- Kamins, M. A. (1990). An investigation into the "match-up" hypothesis in celebrity advertising: When beauty may be only skin deep. *Journal of Advertising*, 19(1), 4-13.
- Keller, K. L., & Aaker, D. A. (1992). The effects of sequential introduction of brand extensions. *Journal of marketing research*, 29(1), 35-50.

- Kim, H., & John, D. R. (2008). Consumer response to brand extensions: Construal level as a moderator of the importance of perceived fit. *Journal of Consumer Psychology* (Elsevier Science), 18(2), 116-126.
- Kross, E., & Ayduk, O. (2008). Facilitating adaptive emotional analysis: Distinguishing distanced-analysis of depressive experiences from immersed-analysis and distraction. *Personality and Social Psychology Bulletin*, 34(7), 924-938.
- Liberman, N., & Förster, J. (2009). The effect of psychological distance on perceptual level of construal. *Cognitive Science*, 33(7), 1330-1341.
- Liviatan, I., Trope, Y., & Liberman, N. (2008). Interpersonal similarity as a social distance dimension: Implications for perception of others' actions. *Journal of experimental social psychology*, 44(5), 1256-1269.
- Malär, L., Krohmer, H., Hoyer, W. D., & Nyffenegger, B. (2011). Emotional Brand Attachment and Brand Personality: The Relative Importance of the Actual and the Ideal Self. *Journal of Marketing*, 75(4), 35-52.
- Marwick, A. (2011). To see and be seen: Celebrity practice on Twitter. *Convergence: the international journal of research into new media technologies*, 17(2), 139-158.
- McCracken, G. (1989). Who is the celebrity endorser? Cultural foundations of the endorsement process. *Journal of consumer research*, 16(3), 310-321.
- McCutcheon, L. E., Lange, R., & Houran, J. (2002). Conceptualization and measurement of celebrity worship. *British journal of psychology*, 93(1), 67-87.
- McGuire, W. J. (1969). The nature of attitudes and attitude change. *The handbook of social psychology*, 3(2), 136-314.
- Mehta, A. (1994). How advertising response modeling (ARM) can increase ad effectiveness. *Journal of Advertising Research*, 34(1), 62-62.

Miller, D. T., Downs, J. S., & Prentice, D. A. (1998). Minimal conditions for the creation of a unit relationship: The social bond between birthdaymates. *European Journal of Social Psychology*, 28(3), 475-481.

Morrissey, B. (2010). YouTube STARS BRANDS. *Adweek*, 51(40), 10-11.

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of advertising*, 19(3), 39-52.

Park, C. W., MacInnis, D. J., & Priester, J. R. (2007). Brand attachment and management of a strategic brand exemplar. Bernd H. Schmitt, ed., Elgar Publishing.

Rosemberg, M. (1979). Conceiving the self. *Clinical Rehabilitation*, 22(2), 179-187.

Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. *Journal of consumer research*, 9(3), 287-300.

Sirgy, M. J. (1985). Using self-congruity and ideal congruity to predict purchase motivation. *Journal of business Research*, 13(3), 195-206.

Sirgy, M. J., Grewal, D., Mangleburg, T. F., Park, J. O., Chon, K. S., Claiborne, C. B., ... & Berkman, H. (1997). Assessing the predictive validity of two methods of measuring self-image congruence. *Journal of the academy of marketing science*, 25(3), 229-241.

Snyder, M. (1979). Self-monitoring processes. *Advances in experimental social psychology*, 12(1), 85-128.

Spry, A., Pappu, R., & Cornwell, T. B. (2011). Celebrity endorsement, brand credibility and brand equity. *European Journal of Marketing*, 45(6), 882-909.

Stephan, E., Liberman, N., & Trope, Y. (2011). The effects of time perspective and level of construal on social distance. *Journal of Experimental Social Psychology*, 47(2), 397-402.

Swaminathan, V., Stilley, K. M., & Ahluwalia, R. (2009). When brand personality matters: The moderating role of attachment styles. *Journal of consumer research*, 35(6), 985-1002.

Thomson, M. (2006). Human Brands: Investigating Antecedents to Consumers' Strong Attachments to Celebrities. *Journal of Marketing*, 70(3), 104-119.

Thomson, M., MacInnis, D. J., & Park, C. W. (2005). The ties that bind: Measuring the strength of consumers' emotional attachments to brands. *Journal of consumer psychology*, 15(1), 77-91.

Till, B. D., & Busler, M. (1998). Matching products with endorsers: attractiveness versus expertise. *Journal of Consumer Marketing*, 15(6), 576-586.

Till, B. D., & Shimp, T. A. (1998). Endorsers in advertising: The case of negative celebrity information. *Journal of advertising*, 27(1), 67-82.

Till, B. D., Stanley, S. M., & Priluck, R. (2008). Classical conditioning and celebrity endorsers: An examination of belongingness and resistance to extinction. *Psychology & Marketing*, 25(2), 179-196.

Tom, G., Clark, R., Elmer, L., Grech, E., Masetti Jr, J., & Sandhar, H. (1992). The use of created versus celebrity spokespersons in advertisements. *Journal of Consumer Marketing*, 9(4), 45-51.

Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological review*, 117(2), 440.

Trope, Y., Liberman, N., & Wakslak, C. (2007). Construal levels and psychological distance: Effects on representation, prediction, evaluation, and behavior. *Journal of consumer psychology: the official journal of the Society for Consumer Psychology*, 17(2), 83.

Van Boven, L., Kane, J., McGraw, A. P., & Dale, J. (2010). Feeling close: emotional intensity reduces perceived psychological distance. *Journal of personality and social psychology*, 98(6), 872.

Whan Park, C., MacInnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of marketing*, 74(6), 1-17.

Appendix A

Endorser credibility (Ohanian, 1990)

Attractiveness: Attractive-unattractive; Classy-not classy; Beautiful- ugly; Elegant- plain; Sexy-not sexy

Trustworthiness: dependable-undependable; honest-dishonest; reliable-unreliable; sincere-insincere; trustworthy-unworthy

Expertise: expert-not an expert, experienced-inexperienced, knowledgeable- unknowledgeable, qualified-unqualified, skilled-unskilled

Celebrity-brand congruence (Keller and Aaker, 1992)

Please tell us how suitable you think the person in this advertisement is for endorsing.

1. Bad fit between person and the brand- Good fit between person and the brand
2. Not logical for the person to endorse-very logical for the person to endorse
3. Not appropriate for the person to endorse-Very appropriate for the person to endorse

Actual Self-Congruence (Sirgy, Grewal, Mangleburg, Park, Chon, Claiborne and Berkman, 1997; Malär, Krohmer, Hoyer and Nyffenegger, 2011)

Please think about the celebrity you like and describe his or her personality (such as stylist, classy, sexy, athletic, or whatever personality you can think of). And now please think of yourself, how do you perceive yourself? Once you have done, please indicate the agreement and disagreement of the following statement.

1. The personality of the celebrity is consistent with how I see myself (my actual self).
2. The personality of the celebrity is a mirror image of who I am.

Ideal Self-Congruence (Sirgy, Grewal, Mangleburg, Park, Chon, Claiborne and Berkman, 1997; Malär, Krohmer, Hoyer and Nyffenegger, 2011)

Please think about the celebrity you like and describe his or her personality (such as stylist, classy, sexy, athletic, or whatever personality you can think of). And now please think of yourself, what kind of person would you like to be? Once you have done, please indicate the agreement and disagreement of the following statement.

1. The personality of the celebrity is consistent with how I would like to be (my ideal self).
2. The personality of the celebrity is a mirror image of who would like to be.

Consumer-celebrity attachment (Thomson, 2006)

1. “I feel better if I am not away from or without XYZ for long periods of time”
2. “I miss XYZ when XYZ is not around”
3. “If XYZ were permanently gone from my life, I’d be upset”
4. “Losing XYZ forever would be distressing to me.”

Brand attachment (Whan Park, MacInnis, Priester, Eisingerich and Iacobucci, 2010)

Brand–self connection

1. “To what extent is [Brand Name] part of you and who you are?”
2. “To what extent do you feel that you are personally connected to [Brand Name]?” These items represent the identity and instrumentality bases of brand–self connection, respectively, that we described previously.

Brand prominence

1. “To what extent are your thoughts and feelings toward [Brand Name] often automatic, coming to mind seemingly on their own?”
2. “To what extent do your thoughts and feelings toward [Brand Name] come to you naturally and instantly?”

Emotional brand attachment (Thomson, MacInnis and Park, 2005)

Please indicate the agreement of the following statement in a 7-point scale (1= “strongly disagree” and 7 = “strongly agree”).

Affection:

My feelings toward the brand can be characterized by:

1. Affection
2. Love

Connection:

My feelings toward the brand can be characterized by:

3. Connection

Passion:

My feelings toward the brand can be characterized by:

4. Passion
5. Delight
6. Captivation

Appendix B

Table 1- Pretest 1: brand familiarity

brands Familiarity

Measure: MEASURE_1

factor1	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
L'Oréal	5.857	.206	5.441	6.273
Nike	5.881	.224	5.429	6.333
H&M	5.857	.267	5.317	6.397
Coca Cola	6.643	.112	6.416	6.869
Samsung	6.000	.229	5.538	6.462

Table 2: Pretest 1: brand familiarity comparisons

brands Familiarity Pairwise Comparisons

Measure: MEASURE_1

(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
L'Oréal	Nike	-.024	.245	.923	-.518	.470
	H&M	.000	.266	1.000	-.538	.538
	Coca Cola	-.786 [*]	.179	.000	-1.147	-.425
	Samsung	-.143	.245	.563	-.637	.351
Nike	L'Oréal	.024	.245	.923	-.470	.518
	H&M	.024	.284	.934	-.550	.598
	Coca Cola	-.762 [*]	.176	.000	-1.118	-.406
	Samsung	-.119	.219	.589	-.561	.323
H&M	L'Oréal	.000	.266	1.000	-.538	.538
	Nike	-.024	.284	.934	-.598	.550
	Coca Cola	-.786 [*]	.230	.001	-1.250	-.321
	Samsung	-.143	.353	.688	-.857	.571
Coca Cola	L'Oréal	.786 [*]	.179	.000	.425	1.147
	Nike	.762 [*]	.176	.000	.406	1.118
	H&M	.786 [*]	.230	.001	.321	1.250
	Samsung	.643 [*]	.226	.007	.187	1.098
Samsung	L'Oréal	.143	.245	.563	-.351	.637
	Nike	.119	.219	.589	-.323	.561
	H&M	.143	.353	.688	-.571	.857

Coca Cola	-1.643*	.226	.007	-1.098	-.187
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Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 3-pretest 2: analysis of celebrity-brand congruence (well-known celebrity)

		Descriptives			
		N	Mean	Std. Deviation	Std. Error
TaylorSwift	Coca Cola	58	5.07	1.94	.25
	L'Oréal	58	5.60	1.73	.23
	Nike	58	4.17	2.15	.28
	H&M	58	5.12	1.89	.25
	Samsung	58	4.60	2.11	.28
	Total	290	4.91	2.01	.12
Rihanna	Coca Cola	59	5.10	1.87	.24
	L'Oréal	59	5.44	1.68	.22
	Nike	59	4.41	1.95	.25
	H&M	59	5.17	1.68	.22
	Samsung	59	4.46	1.99	.26
	Total	295	4.92	1.87	.11
Jennifer Lawrence	Coca Cola	57	4.96	1.78	.24
	L'Oréal	57	5.65	1.53	.20
	Nike	57	4.49	1.79	.24
	H&M	56	5.09	1.74	.23
	Samsung	57	4.56	1.92	.25
	Total	284	4.95	1.79	.11
Justinbieber	Coca Cola	59	4.36	2.28	.30
	L'Oréal	59	3.05	2.12	.28
	Nike	59	4.14	2.18	.28
	H&M	59	3.97	2.21	.29
	Samsung	59	4.19	2.22	.29
	Total	295	3.94	2.24	.13
Wiz Khalifa	Coca Cola	52	4.13	2.03	.28
	L'Oréal	52	2.63	1.96	.27
	Nike	52	4.00	2.13	.30
	H&M	52	3.65	1.92	.27
	Samsung	52	3.90	2.11	.29
	Total	260	3.67	2.09	.13
Christiano Ronaldo	Coca Cola	48	4.77	2.08	.30
	L'Oréal	48	3.35	1.87	.27
	Nike	48	5.71	1.69	.24
	H&M	48	3.92	2.21	.32
	Samsung	48	4.23	2.15	.31
	Total	240	4.40	2.15	.14

Table 4-pretest 2: analysis of celebrity-brand congruence (well-known celebrity)

LSD

Dependent Variable	(I) brand	(J) brand	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Taylor Swift	Coca Cola	L'Oréal	-.53	.37	.14	-1.25	.18
		Nike	.90*	.37	.01	.18	1.62
		H&M	-.05	.37	.89	-.77	.67
		Samsung	.47	.37	.20	-.25	1.18
	L'Oréal	Coca Cola	.53	.37	.14	-.18	1.25
		Nike	1.43*	.37	.00	.71	2.15
		H&M	.48	.37	.19	-.24	1.20
		Samsung	1.00*	.37	.01	.28	1.72
	Nike	Coca Cola	-.90*	.37	.01	-1.62	-.18
		L'Oréal	-1.43*	.37	.00	-2.15	-.71
		H&M	-.95*	.37	.01	-1.67	-.23
		Samsung	-.43	.37	.24	-1.15	.29
	H&M	Coca Cola	.05	.37	.89	-.67	.77
		L'Oréal	-.48	.37	.19	-1.20	.24
		Nike	.95*	.37	.01	.23	1.67
		Samsung	.52	.37	.16	-.20	1.24
Samsung	Coca Cola	-.47	.37	.20	-1.18	.25	
	L'Oréal	-1.00*	.37	.01	-1.72	-.28	
	Nike	.43	.37	.24	-.29	1.15	
	H&M	-.52	.37	.16	-1.24	.20	
Rihanna	Coca Cola	L'Oréal	-.34	.34	.32	-1.01	.33
		Nike	.69*	.34	.04	.03	1.36
		H&M	-.07	.34	.84	-.73	.60
		Samsung	.64	.34	.06	-.02	1.31
	L'Oréal	Coca Cola	.34	.34	.32	-.33	1.01
		Nike	1.03*	.34	.00	.37	1.70
		H&M	.27	.34	.42	-.40	.94
		Samsung	.98*	.34	.00	.32	1.65
	Nike	Coca Cola	-.69*	.34	.04	-1.36	-.03
		L'Oréal	-1.03*	.34	.00	-1.70	-.37
		H&M	-.76*	.34	.03	-1.43	-.10
		Samsung	-.05	.34	.88	-.72	.62

	H&M	Coca Cola	.07	.34	.84	-.60	.73
		L'Oréal	-.27	.34	.42	-.94	.40
		Nike	.76*	.34	.03	.10	1.43
		Samsung	.71*	.34	.04	.05	1.38
	Samsung	Coca Cola	-.64	.34	.06	-1.31	.02
		L'Oréal	-.98*	.34	.00	-1.65	-.32
		Nike	.05	.34	.88	-.62	.72
		H&M	-.71*	.34	.04	-1.38	-.05
Jennifer Lawrence	Coca Cola	L'Oréal	-.68*	.33	.04	-1.33	-.04
		Nike	.47	.33	.15	-.17	1.12
		H&M	-.12	.33	.71	-.78	.53
		Samsung	.40	.33	.22	-.24	1.05
	L'Oréal	Coca Cola	.68*	.33	.04	.04	1.33
		Nike	1.16*	.33	.00	.51	1.81
		H&M	.56	.33	.09	-.09	1.21
		Samsung	1.09*	.33	.00	.44	1.74
	Nike	Coca Cola	-.47	.33	.15	-1.12	.17
		L'Oréal	-1.16*	.33	.00	-1.81	-.51
		H&M	-.60	.33	.07	-1.25	.05
		Samsung	-.07	.33	.83	-.72	.58
	H&M	Coca Cola	.12	.33	.71	-.53	.78
		L'Oréal	-.56	.33	.09	-1.21	.09
		Nike	.60	.33	.07	-.05	1.25
		Samsung	.53	.33	.11	-.12	1.18
	Samsung	Coca Cola	-.40	.33	.22	-1.05	.24
		L'Oréal	-1.09*	.33	.00	-1.74	-.44
		Nike	.07	.33	.83	-.58	.72
		H&M	-.53	.33	.11	-1.18	.12
Justin Bieber	Coca Cola	L'Oréal	1.31*	.41	.00	.51	2.10
		Nike	.22	.41	.59	-.58	1.02
		H&M	.39	.41	.34	-.41	1.19
		Samsung	.17	.41	.68	-.63	.97
	L'Oréal	Coca Cola	-1.31*	.41	.00	-2.10	-.51
		Nike	-1.08*	.41	.01	-1.88	-.29
		H&M	-.92*	.41	.02	-1.71	-.12
		Samsung	-1.14*	.41	.01	-1.93	-.34
	Nike	Coca Cola	-.22	.41	.59	-1.02	.58
		L'Oréal	1.08*	.41	.01	.29	1.88
		H&M	.17	.41	.68	-.63	.97

	H&M	1.79*	.41	.00	.98	2.60
	Samsung	1.48*	.41	.00	.67	2.29
H&M	Coca Cola	-.85*	.41	.04	-1.66	-.05
	L'Oréal	.56	.41	.17	-.25	1.37
	Nike	-1.79*	.41	.00	-2.60	-.98
	Samsung	-.31	.41	.45	-1.12	.50
Samsung	Coca Cola	-.54	.41	.19	-1.35	.27
	L'Oréal	.88*	.41	.03	.07	1.68
	Nike	-1.48*	.41	.00	-2.29	-.67
	H&M	.31	.41	.45	-.50	1.12

*. The mean difference is significant at the 0.05 level.

Table 5: pretest 2: analysis of clebrity-brand congruence (social media celebrity)

Multiple Comparisons

LSD

Dependent Variable	(I) brand	(J) brand	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Jenna Marbles	Coca Cola	L'Oréal	.11	.47	.82	-.81	1.03
		Nike	.22	.47	.64	-.70	1.14
		H&M	-.11	.47	.82	-1.03	.81
		Samsung	.14	.47	.77	-.78	1.06
L'Oréal	Coca Cola	L'Oréal	-.11	.47	.82	-1.03	.81
		Nike	.11	.47	.82	-.81	1.03
		H&M	-.22	.47	.64	-1.14	.70
		Samsung	.03	.47	.95	-.89	.95
Nike	Coca Cola	L'Oréal	-.22	.47	.64	-1.14	.70
		L'Oréal	-.11	.47	.82	-1.03	.81
		H&M	-.32	.47	.49	-1.24	.60
		Samsung	-.08	.47	.86	-1.00	.84
H&M	Coca Cola	L'Oréal	.11	.47	.82	-.81	1.03
		L'Oréal	.22	.47	.64	-.70	1.14
		Nike	.32	.47	.49	-.60	1.24
		Samsung	.24	.47	.60	-.68	1.16
Samsung	Coca Cola	L'Oréal	-.14	.47	.77	-1.06	.78
		L'Oréal	-.03	.47	.95	-.95	.89

		Nike	.08	.47	.86	-.84	1.00
		H&M	-.24	.47	.60	-1.16	.68
Bethany Mota	Coca Cola	L'Oréal	-.67	.49	.17	-1.63	.29
		Nike	-.56	.49	.25	-1.52	.40
		H&M	-.56	.49	.25	-1.52	.40
		Samsung	.26	.49	.59	-.70	1.22
	L'Oréal	Coca Cola	.67	.49	.17	-.29	1.63
		Nike	.11	.49	.82	-.85	1.07
		H&M	.11	.49	.82	-.85	1.07
		Samsung	.93	.49	.06	-.03	1.89
	Nike	Coca Cola	.56	.49	.25	-.40	1.52
		L'Oréal	-.11	.49	.82	-1.07	.85
		H&M	.00	.49	1.00	-.96	.96
		Samsung	.81	.49	.10	-.15	1.78
	H&M	Coca Cola	.56	.49	.25	-.40	1.52
		L'Oréal	-.11	.49	.82	-1.07	.85
		Nike	.00	.49	1.00	-.96	.96
		Samsung	.81	.49	.10	-.15	1.78
Samsung	Coca Cola	-.26	.49	.59	-1.22	.70	
	L'Oréal	-.93	.49	.06	-1.89	.03	
	Nike	-.81	.49	.10	-1.78	.15	
	H&M	-.81	.49	.10	-1.78	.15	
Eva Gutowski	Coca Cola	L'Oréal	.26	.56	.64	-.85	1.37
		Nike	.17	.56	.76	-.94	1.28
		H&M	.13	.56	.82	-.98	1.24
		Samsung	.83	.56	.14	-.28	1.94
	L'Oréal	Coca Cola	-.26	.56	.64	-1.37	.85
		Nike	-.09	.56	.88	-1.20	1.02
		H&M	-.13	.56	.82	-1.24	.98
		Samsung	.57	.56	.31	-.54	1.67
	Nike	Coca Cola	-.17	.56	.76	-1.28	.94
		L'Oréal	.09	.56	.88	-1.02	1.20
		H&M	-.04	.56	.94	-1.15	1.07
		Samsung	.65	.56	.25	-.46	1.76
	H&M	Coca Cola	-.13	.56	.82	-1.24	.98
		L'Oréal	.13	.56	.82	-.98	1.24
		Nike	.04	.56	.94	-1.07	1.15
		Samsung	.70	.56	.22	-.41	1.81
Samsung	Coca Cola	-.83	.56	.14	-1.94	.28	

	Samsung	Coca Cola	.53	.51	.30	-.48	1.54
		L'Oréal	.66	.51	.20	-.35	1.67
		Nike	.72	.51	.16	-.29	1.73
		H&M	.31	.51	.54	-.70	1.32
Casey Neistat	Coca Cola	L'Oréal	.46	.54	.39	-.60	1.52
		Nike	.12	.54	.83	-.94	1.17
		H&M	.19	.54	.72	-.87	1.25
		Samsung	-.04	.54	.94	-1.10	1.02
	L'Oréal	Coca Cola	-.46	.54	.39	-1.52	.60
		Nike	-.35	.54	.52	-1.41	.71
		H&M	-.27	.54	.62	-1.33	.79
		Samsung	-.50	.54	.35	-1.56	.56
	Nike	Coca Cola	-.12	.54	.83	-1.17	.94
		L'Oréal	.35	.54	.52	-.71	1.41
		H&M	.08	.54	.89	-.98	1.14
		Samsung	-.15	.54	.77	-1.21	.91
	H&M	Coca Cola	-.19	.54	.72	-1.25	.87
		L'Oréal	.27	.54	.62	-.79	1.33
		Nike	-.08	.54	.89	-1.14	.98
		Samsung	-.23	.54	.67	-1.29	.83
	Samsung	Coca Cola	.04	.54	.94	-1.02	1.10
		L'Oréal	.50	.54	.35	-.56	1.56
		Nike	.15	.54	.77	-.91	1.21
		H&M	.23	.54	.67	-.83	1.29

Table 6: pretest 2: analysis of clebrity-brand congruence (social media celebrity)

Descriptives

		N	Mean	Std. Deviation	Std. Error
Jenna Marbles	Coca Cola	37	4.57	2.01	.33
	L'Oréal	37	4.46	1.98	.33
	Nike	37	4.35	1.98	.32
	H&M	37	4.68	2.01	.33
	Samsung	37	4.43	2.05	.34
	Total	185	4.50	1.99	.15
Bethany Mota	Coca Cola	27	4.22	1.93	.37
	L'Oréal	27	4.89	1.85	.36
	Nike	27	4.78	1.74	.33
	H&M	27	4.78	1.87	.36
	Samsung	27	3.96	1.51	.29
	Total	135	4.53	1.79	.15
Eva Gutowski	Coca Cola	23	4.70	2.12	.44
	L'Oréal	23	4.43	1.97	.41
	Nike	23	4.52	1.86	.39
	H&M	23	4.57	1.95	.41
	Samsung	23	3.87	1.55	.32
	Total	115	4.42	1.89	.18
Cameron Dallas	Coca Cola	27	4.19	2.02	.39
	L'Oréal	27	3.74	1.87	.36
	Nike	27	4.22	2.01	.39
	H&M	27	4.30	1.98	.38
	Samsung	26	4.27	1.89	.37
	Total	134	4.14	1.94	.17
Tyler Oakley	Coca Cola	32	4.25	2.11	.37
	L'Oréal	32	4.13	2.12	.38
	Nike	32	4.06	2.00	.35
	H&M	32	4.47	1.97	.35
	Samsung	32	4.78	2.03	.36
	Total	160	4.34	2.04	.16
Casey Neistat	Coca Cola	26	4.31	1.89	.37
	L'Oréal	26	3.85	1.97	.39
	Nike	26	4.19	1.86	.36
	H&M	26	4.12	1.88	.37
	Samsung	26	4.35	2.04	.40
	Total	130	4.16	1.91	.17

Table 7: pretest 2: analysis of celebrity-brand congruence for each brand

Descriptives					
		N	Mean	Std. Deviation	Std. Error
Coca	Taylor Swift	58	5.07	1.936	.254

	Rihanna	59	5.10	1.873	.244
	Jennifer Lawrence	57	4.96	1.783	.236
	Justin Bieber	59	4.36	2.280	.297
	Wiz Khalifa	52	4.13	2.029	.281
	Christiano Ronaldo	48	4.77	2.076	.300
	Jenna Marbles	37	4.57	2.007	.330
	Bethany Mota	27	4.22	1.928	.371
	Eva Gutowski	23	4.70	2.120	.442
	Cameron Dallas	27	4.19	2.020	.389
	Tyler Oakley	32	4.25	2.110	.373
	Casey Neistat	26	4.31	1.892	.371
	Total	505	4.62	2.017	.090
loreal	Taylor Swift	58	5.60	1.726	.227
	Rihanna	59	5.44	1.684	.219
	Jennifer Lawrence	57	5.65	1.529	.203
	Justin Bieber	59	3.05	2.121	.276
	Wiz Khalifa	52	2.63	1.961	.272
	Christiano Ronaldo	48	3.35	1.874	.270
	Jenna Marbles	37	4.46	1.980	.326
	Bethany Mota	27	4.89	1.847	.355
	Eva Gutowski	23	4.43	1.97	.41
	Cameron Dallas	27	3.74	1.87	.36
	Tyler Oakley	32	4.13	2.12	.38
	Casey Neistat	26	3.85	1.97	.39
	Total	505	4.31	2.14	.10
Nike	Taylor Swift	58	4.17	2.15	.28
	Rihanna	59	4.41	1.95	.25
	Jennifer Lawrence	57	4.49	1.79	.24
	Justin Bieber	59	4.14	2.18	.28
	Wiz Khalifa	52	4.00	2.13	.30
	Christiano Ronaldo	48	5.71	1.69	.24
	Jenna Marbles	37	4.35	1.98	.32
	Bethany Mota	27	4.78	1.74	.33
	Eva Gutowski	23	4.52	1.86	.39
	Cameron Dallas	27	4.22	2.01	.39
	Tyler Oakley	32	4.06	2.00	.35
	Casey Neistat	26	4.19	1.86	.36
	Total	505	4.42	2.00	.09

hm	Taylor Swift	58	5.12	1.89	.25
	Rihanna	59	5.17	1.68	.22
	Jennifer Lawrence	56	5.09	1.74	.23
	Justin Bieber	59	3.97	2.21	.29
	Wiz Khalifa	52	3.65	1.92	.27
	Christiano Ronaldo	48	3.92	2.21	.32
	Jenna Marbles	37	4.68	2.01	.33
	Bethany Mota	27	4.78	1.87	.36
	Eva Gutowski	23	4.57	1.95	.41
	Cameron Dallas	27	4.30	1.98	.38
	Tyler Oakley	32	4.47	1.97	.35
	Casey Neistat	26	4.12	1.88	.37
	Total	504	4.51	2.00	.09
Samsung	Taylor Swift	58	4.60	2.11	.28
	Rihanna	59	4.46	1.99	.26
	Jennifer Lawrence	57	4.56	1.92	.25
	Justin Bieber	59	4.19	2.22	.29
	Wiz Khalifa	52	3.90	2.11	.29
	Christiano Ronaldo	48	4.23	2.15	.31
	Jenna Marbles	37	4.43	2.05	.34
	Bethany Mota	27	3.96	1.51	.29
	Eva Gutowski	23	3.87	1.55	.32
	Cameron Dallas	26	4.27	1.89	.37
	Tyler Oakley	32	4.78	2.03	.36
	Casey Neistat	26	4.35	2.04	.40
	Total	504	4.33	2.01	.09

Table 8: pretest 2: analysis of celebrity-brand congruence for each brand

Multiple Comparisons

LSD

Dependent Variable	(I) celebrity	(J) celebrity	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Coca Cola	Taylor Swift	Rihanna	-.03	.37	.93	-.76	.70
		Jennifer Lawrence	.10	.37	.78	-.63	.84
		Justin Bieber	.71	.37	.06	-.02	1.44

	Wiz Khalifa	.93 [*]	.38	.02	.18	1.69
	Christiano	.30	.39	.45	-.47	1.07
	Ronaldo	.50	.42	.24	-.33	1.33
	Bethany Mota	.85	.47	.07	-.07	1.76
	Eva Gutowski	.37	.49	.45	-.60	1.34
	Cameron Dallas	.88	.47	.06	-.03	1.80
	Tyler Oakley	.82	.44	.06	-.05	1.69
	Casey Neistat	.76	.47	.11	-.17	1.69
Rihanna	Taylor Swift	.03	.37	.93	-.70	.76
	Jennifer	.14	.37	.71	-.60	.87
	Lawrence	.75 [*]	.37	.04	.02	1.47
	Justin Bieber	.97 [*]	.38	.01	.22	1.72
	Wiz Khalifa	.33	.39	.40	-.44	1.10
	Christiano	.53	.42	.20	-.29	1.36
	Ronaldo	.88	.47	.06	-.04	1.80
	Jenna Marbles	.41	.49	.41	-.56	1.37
	Bethany Mota	.92 [*]	.47	.05	.00	1.83
	Eva Gutowski	.85	.44	.05	-.01	1.72
	Cameron Dallas	.79	.47	.09	-.13	1.72
	Tyler Oakley	-.10	.37	.78	-.84	.63
Jennifer	Taylor Swift	-.14	.37	.71	-.87	.60
Lawrence	Rihanna	.61	.37	.10	-.12	1.34
	Justin Bieber	.83 [*]	.38	.03	.07	1.59
	Wiz Khalifa	.19	.39	.62	-.58	.97
	Christiano	.40	.42	.35	-.43	1.23
	Ronaldo	.74	.47	.11	-.18	1.66
	Jenna Marbles	.27	.50	.59	-.70	1.24
	Bethany Mota	.78	.47	.10	-.14	1.70
	Eva Gutowski	.71	.44	.11	-.16	1.59
	Cameron Dallas	.66	.47	.17	-.28	1.59
	Tyler Oakley	-.71	.37	.06	-1.44	.02
Justin Bieber	Taylor Swift	-.75 [*]	.37	.04	-1.47	-.02
	Rihanna	-.61	.37	.10	-1.34	.12
	Jennifer					
	Lawrence					

	Wiz Khalifa	.22	.38	.56	-.53	.97
	Christiano					
	Ronaldo	-.41	.39	.29	-1.18	.35
	Jenna Marbles	-.21	.42	.62	-1.04	.61
	Bethany Mota	.13	.47	.77	-.78	1.05
	Eva Gutowski	-.34	.49	.49	-1.31	.63
	Cameron Dallas	.17	.47	.71	-.74	1.09
	Tyler Oakley	.11	.44	.81	-.76	.97
	Casey Neistat	.05	.47	.92	-.88	.98
Wiz Khalifa	Taylor Swift	-.93 [*]	.38	.02	-1.69	-.18
	Rihanna	-.97 [*]	.38	.01	-1.72	-.22
	Jennifer					
	Lawrence	-.83 [*]	.38	.03	-1.59	-.07
	Justin Bieber	-.22	.38	.56	-.97	.53
	Christiano					
	Ronaldo	-.64	.40	.11	-1.43	.15
	Jenna Marbles	-.43	.43	.32	-1.28	.41
	Bethany Mota	-.09	.48	.85	-1.02	.85
	Eva Gutowski	-.56	.50	.26	-1.55	.43
	Cameron Dallas	-.05	.48	.92	-.99	.88
	Tyler Oakley	-.12	.45	.80	-1.00	.77
	Casey Neistat	-.17	.48	.72	-1.12	.77
Christiano	Taylor Swift	-.30	.39	.45	-1.07	.47
Ronaldo	Rihanna	-.33	.39	.40	-1.10	.44
	Jennifer					
	Lawrence	-.19	.39	.62	-.97	.58
	Justin Bieber	.41	.39	.29	-.35	1.18
	Wiz Khalifa	.64	.40	.11	-.15	1.43
	Jenna Marbles	.20	.44	.64	-.66	1.07
	Bethany Mota	.55	.48	.26	-.40	1.50
	Eva Gutowski	.08	.51	.88	-.92	1.07
	Cameron Dallas	.59	.48	.23	-.36	1.53
	Tyler Oakley	.52	.46	.26	-.38	1.42
	Casey Neistat	.46	.49	.34	-.50	1.42
Jenna Marbles	Taylor Swift	-.50	.42	.24	-1.33	.33
	Rihanna	-.53	.42	.20	-1.36	.29
	Jennifer					
	Lawrence	-.40	.42	.35	-1.23	.43

	Justin Bieber	.21	.42	.62	-.61	1.04
	Wiz Khalifa	.43	.43	.32	-.41	1.28
	Christiano	-.20	.44	.64	-1.07	.66
	Ronaldo					
	Bethany Mota	.35	.51	.50	-.65	1.34
	Eva Gutowski	-.13	.53	.81	-1.17	.92
	Cameron Dallas	.38	.51	.45	-.62	1.38
	Tyler Oakley	.32	.48	.51	-.63	1.27
	Casey Neistat	.26	.51	.61	-.75	1.27
Bethany Mota	Taylor Swift	-.85	.47	.07	-1.76	.07
	Rihanna	-.88	.47	.06	-1.80	.04
	Jennifer					
	Lawrence	-.74	.47	.11	-1.66	.18
	Justin Bieber	-.13	.47	.77	-1.05	.78
	Wiz Khalifa	.09	.48	.85	-.85	1.02
	Christiano	-.55	.48	.26	-1.50	.40
	Ronaldo					
	Jenna Marbles	-.35	.51	.50	-1.34	.65
	Eva Gutowski	-.47	.57	.41	-1.59	.64
	Cameron Dallas	.04	.55	.95	-1.04	1.11
	Tyler Oakley	-.03	.52	.96	-1.06	1.00
	Casey Neistat	-.09	.55	.88	-1.17	1.00
Eva Gutowski	Taylor Swift	-.37	.49	.45	-1.34	.60
	Rihanna	-.41	.49	.41	-1.37	.56
	Jennifer					
	Lawrence	-.27	.50	.59	-1.24	.70
	Justin Bieber	.34	.49	.49	-.63	1.31
	Wiz Khalifa	.56	.50	.26	-.43	1.55
	Christiano	-.08	.51	.88	-1.07	.92
	Ronaldo					
	Jenna Marbles	.13	.53	.81	-.92	1.17
	Bethany Mota	.47	.57	.41	-.64	1.59
	Cameron Dallas	.51	.57	.37	-.61	1.63
	Tyler Oakley	.45	.55	.42	-.63	1.52
	Casey Neistat	.39	.57	.50	-.74	1.52
Cameron Dallas	Taylor Swift	-.88	.47	.06	-1.80	.03
	Rihanna	-.92	.47	.05	-1.83	.00

	Jennifer Lawrence					
	Justin Bieber	-05	.35	.90	-.73	.64
	Wiz Khalifa	2.55 [*]	.35	.00	1.87	3.23
	Christiano Ronaldo	2.97 [*]	.36	.00	2.27	3.67
	Jenna Marbles	2.25 [*]	.37	.00	1.53	2.97
	Bethany Mota	1.14 [*]	.39	.00	.37	1.92
	Eva Gutowski	.71	.44	.10	-.14	1.57
	Cameron Dallas	1.17 [*]	.46	.01	.26	2.08
	Tyler Oakley	1.86 [*]	.44	.00	1.01	2.72
	Casey Neistat	1.48 [*]	.41	.00	.67	2.29
	Casey Neistat	1.76 [*]	.44	.00	.89	2.63
Rihanna	Taylor Swift					
	Jennifer Lawrence	-05	.35	.90	-.73	.64
	Justin Bieber	-16	.35	.64	-.84	.52
	Wiz Khalifa	-21	.35	.55	-.89	.48
	Christiano Ronaldo	2.39 [*]	.34	.00	1.71	3.07
	Jenna Marbles	2.81 [*]	.36	.00	2.11	3.51
	Bethany Mota	2.09 [*]	.36	.00	1.37	2.80
	Eva Gutowski	.98 [*]	.39	.01	.21	1.75
	Cameron Dallas	.55	.44	.21	-.30	1.41
	Tyler Oakley	1.01 [*]	.46	.03	.10	1.91
	Casey Neistat	1.70 [*]	.44	.00	.84	2.56
	Casey Neistat	1.32 [*]	.41	.00	.51	2.12
	Casey Neistat	1.59 [*]	.44	.00	.73	2.46
Jennifer Lawrence	Taylor Swift					
	Rihanna	.05	.35	.90	-.64	.73
	Justin Bieber	.21	.35	.55	-.48	.89
	Wiz Khalifa	2.60 [*]	.35	.00	1.91	3.28
	Christiano Ronaldo	3.01 [*]	.36	.00	2.31	3.72
	Jenna Marbles	2.29 [*]	.37	.00	1.57	3.02
	Bethany Mota	1.19 [*]	.40	.00	.41	1.97
	Eva Gutowski	.76	.44	.08	-.10	1.62
	Cameron Dallas	1.21 [*]	.46	.01	.30	2.12
	Tyler Oakley	1.91 [*]	.44	.00	1.05	2.77
	Casey Neistat	1.52 [*]	.41	.00	.71	2.34
	Casey Neistat	1.80 [*]	.44	.00	.93	2.67
Justin Bieber	Taylor Swift					
	Rihanna	-2.55 [*]	.35	.00	-3.23	-1.87
	Rihanna	-2.39 [*]	.34	.00	-3.07	-1.71

	Jennifer	-2.60 [*]	.35	.00	-3.28	-1.91
	Lawrence					
	Wiz Khalifa	.42	.36	.24	-.28	1.12
	Christiano	-.30	.36	.41	-1.02	.41
	Ronaldo					
	Jenna Marbles	-1.41 [*]	.39	.00	-2.18	-.64
	Bethany Mota	-1.84 [*]	.44	.00	-2.69	-.98
	Eva Gutowski	-1.38 [*]	.46	.00	-2.29	-.48
	Cameron Dallas	-.69	.44	.11	-1.55	.17
	Tyler Oakley	-1.07 [*]	.41	.01	-1.88	-.27
	Casey Neistat	-.80	.44	.07	-1.66	.07
Wiz Khalifa	Taylor Swift	-2.97 [*]	.36	.00	-3.67	-2.27
	Rihanna	-2.81 [*]	.36	.00	-3.51	-2.11
	Jennifer	-3.01 [*]	.36	.00	-3.72	-2.31
	Lawrence					
	Justin Bieber	-.42	.36	.24	-1.12	.28
	Christiano	-.72	.38	.06	-1.46	.02
	Ronaldo					
	Jenna Marbles	-1.82 [*]	.40	.00	-2.62	-1.03
	Bethany Mota	-2.25 [*]	.44	.00	-3.13	-1.38
	Eva Gutowski	-1.80 [*]	.47	.00	-2.72	-.88
	Cameron Dallas	-1.11 [*]	.44	.01	-1.98	-.23
	Tyler Oakley	-1.49 [*]	.42	.00	-2.32	-.66
	Casey Neistat	-1.21 [*]	.45	.01	-2.10	-.33
Christiano	Taylor Swift	-2.25 [*]	.37	.00	-2.97	-1.53
Ronaldo	Rihanna	-2.09 [*]	.36	.00	-2.80	-1.37
	Jennifer	-2.29 [*]	.37	.00	-3.02	-1.57
	Lawrence					
	Justin Bieber	.30	.36	.41	-.41	1.02
	Wiz Khalifa	.72	.38	.06	-.02	1.46
	Jenna Marbles	-1.11 [*]	.41	.01	-1.91	-.30
	Bethany Mota	-1.53 [*]	.45	.00	-2.42	-.65
	Eva Gutowski	-1.08 [*]	.48	.02	-2.01	-.15
	Cameron Dallas	-.39	.45	.39	-1.27	.50
	Tyler Oakley	-.77	.43	.07	-1.61	.07
	Casey Neistat	-.49	.46	.28	-1.39	.40
Jenna Marbles	Taylor Swift	-1.14 [*]	.39	.00	-1.92	-.37
	Rihanna	-.98 [*]	.39	.01	-1.75	-.21
	Jennifer	-1.19 [*]	.40	.00	-1.97	-.41
	Lawrence					

	Justin Bieber	1.41 [*]	.39	.00	.64	2.18
	Wiz Khalifa	1.82 [*]	.40	.00	1.03	2.62
	Christiano	1.11 [*]	.41	.01	.30	1.91
	Ronaldo					
	Bethany Mota	-.43	.47	.37	-1.36	.50
	Eva Gutowski	.02	.50	.96	-.95	1.00
	Cameron Dallas	.72	.47	.13	-.21	1.65
	Tyler Oakley	.33	.45	.46	-.55	1.22
	Casey Neistat	.61	.48	.20	-.33	1.56
Bethany Mota	Taylor Swift	-.71	.44	.10	-1.57	.14
	Rihanna	-.55	.44	.21	-1.41	.30
	Jennifer					
	Lawrence	-.76	.44	.08	-1.62	.10
	Justin Bieber	1.84 [*]	.44	.00	.98	2.69
	Wiz Khalifa	2.25 [*]	.44	.00	1.38	3.13
	Christiano	1.53 [*]	.45	.00	.65	2.42
	Ronaldo					
	Jenna Marbles	.43	.47	.37	-.50	1.36
	Eva Gutowski	.45	.53	.39	-.59	1.50
	Cameron Dallas	1.15 [*]	.51	.02	.15	2.15
	Tyler Oakley	.76	.49	.12	-.20	1.73
	Casey Neistat	1.04 [*]	.51	.04	.03	2.05
Eva Gutowski	Taylor Swift	-1.17 [*]	.46	.01	-2.08	-.26
	Rihanna	-1.01 [*]	.46	.03	-1.91	-.10
	Jennifer					
	Lawrence	-1.21 [*]	.46	.01	-2.12	-.30
	Justin Bieber	1.38 [*]	.46	.00	.48	2.29
	Wiz Khalifa	1.80 [*]	.47	.00	.88	2.72
	Christiano	1.08 [*]	.48	.02	.15	2.01
	Ronaldo					
	Jenna Marbles	-.02	.50	.96	-1.00	.95
	Bethany Mota	-.45	.53	.39	-1.50	.59
	Cameron Dallas	.69	.53	.19	-.35	1.74
	Tyler Oakley	.31	.51	.55	-.70	1.32
	Casey Neistat	.59	.54	.27	-.47	1.64
Cameron Dallas	Taylor Swift	-1.86 [*]	.44	.00	-2.72	-1.01
	Rihanna	-1.70 [*]	.44	.00	-2.56	-.84
	Jennifer					
	Lawrence	-1.91 [*]	.44	.00	-2.77	-1.05
	Justin Bieber	.69	.44	.11	-.17	1.55

		Wiz Khalifa	1.11 [†]	.44	.01	.23	1.98
		Christiano	.39	.45	.39	-.50	1.27
		Ronaldo					
		Jenna Marbles	-.72	.47	.13	-1.65	.21
		Bethany Mota	-1.15 [†]	.51	.02	-2.15	-.15
		Eva Gutowski	-.69	.53	.19	-1.74	.35
		Tyler Oakley	-.38	.49	.43	-1.35	.58
		Casey Neistat	-.11	.51	.84	-1.12	.91
	Tyler Oakley	Taylor Swift	-1.48 [†]	.41	.00	-2.29	-.67
		Rihanna	-1.32 [†]	.41	.00	-2.12	-.51
		Jennifer	-1.52 [†]	.41	.00	-2.34	-.71
		Lawrence					
		Justin Bieber	1.07 [†]	.41	.01	.27	1.88
		Wiz Khalifa	1.49 [†]	.42	.00	.66	2.32
		Christiano					
		Ronaldo	.77	.43	.07	-.07	1.61
		Jenna Marbles	-.33	.45	.46	-1.22	.55
		Bethany Mota	-.76	.49	.12	-1.73	.20
		Eva Gutowski	-.31	.51	.55	-1.32	.70
		Cameron Dallas	.38	.49	.43	-.58	1.35
		Casey Neistat	.28	.49	.57	-.69	1.25
	Casey Neistat	Taylor Swift	-1.76 [†]	.44	.00	-2.63	-.89
		Rihanna	-1.59 [†]	.44	.00	-2.46	-.73
		Jennifer	-1.80 [†]	.44	.00	-2.67	-.93
		Lawrence					
		Justin Bieber	.80	.44	.07	-.07	1.66
		Wiz Khalifa	1.21 [†]	.45	.01	.33	2.10
		Christiano					
		Ronaldo	.49	.46	.28	-.40	1.39
		Jenna Marbles	-.61	.48	.20	-1.56	.33
		Bethany Mota	-1.04 [†]	.51	.04	-2.05	-.03
		Eva Gutowski	-.59	.54	.27	-1.64	.47
		Cameron Dallas	.11	.51	.84	-.91	1.12
		Tyler Oakley	-.28	.49	.57	-1.25	.69
Nike	Taylor Swift	Rihanna	-.23	.36	.52	-.95	.48
		Jennifer					
		Lawrence	-.32	.37	.39	-1.04	.40
		Justin Bieber	.04	.36	.92	-.68	.75
		Wiz Khalifa	.17	.38	.65	-.57	.91

	Christiano	-1.54 [*]	.38	.00	-2.29	-.78
	Ronaldo					
	Jenna Marbles	-.18	.41	.67	-.99	.64
	Bethany Mota	-.61	.46	.19	-1.51	.30
	Eva Gutowski	-.35	.49	.47	-1.30	.60
	Cameron Dallas	-.05	.46	.91	-.95	.85
	Tyler Oakley	.11	.43	.80	-.74	.96
	Casey Neistat	-.02	.46	.97	-.93	.89
Rihanna	Taylor Swift	.23	.36	.52	-.48	.95
	Jennifer					
	Lawrence	-.08	.37	.82	-.80	.63
	Justin Bieber	.27	.36	.45	-.44	.98
	Wiz Khalifa	.41	.37	.28	-.33	1.14
	Christiano	-1.30 [*]	.38	.00	-2.05	-.55
	Ronaldo					
	Jenna Marbles	.06	.41	.89	-.76	.87
	Bethany Mota	-.37	.46	.42	-1.27	.53
	Eva Gutowski	-.11	.48	.81	-1.07	.84
	Cameron Dallas	.18	.46	.69	-.71	1.08
	Tyler Oakley	.34	.43	.43	-.51	1.19
	Casey Neistat	.21	.46	.64	-.70	1.13
Jennifer	Taylor Swift	.32	.37	.39	-.40	1.04
Lawrence	Rihanna	.08	.37	.82	-.63	.80
	Justin Bieber	.36	.37	.33	-.36	1.07
	Wiz Khalifa	.49	.38	.19	-.25	1.23
	Christiano	-1.22 [*]	.39	.00	-1.98	-.46
	Ronaldo					
	Jenna Marbles	.14	.42	.74	-.68	.96
	Bethany Mota	-.29	.46	.53	-1.19	.62
	Eva Gutowski	-.03	.49	.95	-.99	.93
	Cameron Dallas	.27	.46	.56	-.64	1.17
	Tyler Oakley	.43	.44	.32	-.43	1.28
	Casey Neistat	.30	.47	.52	-.62	1.21
Justin Bieber	Taylor Swift	-.04	.36	.92	-.75	.68
	Rihanna	-.27	.36	.45	-.98	.44
	Jennifer	-.36	.37	.33	-1.07	.36
	Lawrence					
	Wiz Khalifa	.14	.37	.72	-.60	.87
	Christiano	-1.57 [*]	.38	.00	-2.33	-.82
	Ronaldo					

	Jenna Marbles		-0.22	.41	.60	-1.03	.60
	Bethany Mota		-0.64	.46	.16	-1.54	.26
	Eva Gutowski		-0.39	.48	.43	-1.34	.57
	Cameron Dallas		-0.09	.46	.85	-.99	.81
	Tyler Oakley		.07	.43	.87	-.78	.92
	Casey Neistat		-.06	.46	.90	-.97	.85
Wiz Khalifa	Taylor Swift		-.17	.38	.65	-.91	.57
	Rihanna		-.41	.37	.28	-1.14	.33
	Jennifer Lawrence		-.49	.38	.19	-1.23	.25
	Justin Bieber		-.14	.37	.72	-.87	.60
	Christiano Ronaldo		-1.71 [*]	.39	.00	-2.48	-.93
	Jenna Marbles		-.35	.42	.41	-1.18	.48
	Bethany Mota		-.78	.47	.10	-1.70	.14
	Eva Gutowski		-.52	.49	.29	-1.49	.45
	Cameron Dallas		-.22	.47	.63	-1.14	.70
	Tyler Oakley		-.06	.44	.89	-.93	.81
	Casey Neistat		-.19	.47	.68	-1.12	.74
Christiano Ronaldo	Taylor Swift		1.54 [*]	.38	.00	.78	2.29
	Rihanna		1.30 [*]	.38	.00	.55	2.05
	Jennifer Lawrence		1.22 [*]	.39	.00	.46	1.98
	Justin Bieber		1.57 [*]	.38	.00	.82	2.33
	Wiz Khalifa		1.71 [*]	.39	.00	.93	2.48
	Jenna Marbles		1.36 [*]	.43	.00	.51	2.20
	Bethany Mota		.93	.47	.05	.00	1.86
	Eva Gutowski		1.19 [*]	.50	.02	.21	2.17
	Cameron Dallas		1.49 [*]	.47	.00	.56	2.42
	Tyler Oakley		1.65 [*]	.45	.00	.76	2.53
	Casey Neistat		1.52 [*]	.48	.00	.57	2.46
Jenna Marbles	Taylor Swift		.18	.41	.67	-.64	.99
	Rihanna		-.06	.41	.89	-.87	.76
	Jennifer Lawrence		-.14	.42	.74	-.96	.68
	Justin Bieber		.22	.41	.60	-.60	1.03
	Wiz Khalifa		.35	.42	.41	-.48	1.18
	Christiano Ronaldo		-1.36 [*]	.43	.00	-2.20	-.51
	Bethany Mota		-.43	.50	.39	-1.41	.55

	Eva Gutowski		-.17	.52	.74	-1.20	.86
	Cameron Dallas		.13	.50	.80	-.85	1.11
	Tyler Oakley		.29	.48	.54	-.65	1.22
	Casey Neistat		.16	.50	.75	-.83	1.15
Bethany Mota	Taylor Swift		.61	.46	.19	-.30	1.51
	Rihanna		.37	.46	.42	-.53	1.27
	Jennifer		.29	.46	.53	-.62	1.19
	Lawrence						
	Justin Bieber		.64	.46	.16	-.26	1.54
	Wiz Khalifa		.78	.47	.10	-.14	1.70
	Christiano		-.93	.47	.05	-1.86	.00
	Ronaldo						
	Jenna Marbles		.43	.50	.39	-.55	1.41
	Eva Gutowski		.26	.56	.65	-.84	1.35
	Cameron Dallas		.56	.54	.30	-.50	1.61
	Tyler Oakley		.72	.51	.17	-.30	1.73
	Casey Neistat		.59	.54	.28	-.48	1.65
Eva Gutowski	Taylor Swift		.35	.49	.47	-.60	1.30
	Rihanna		.11	.48	.81	-.84	1.07
	Jennifer						
	Lawrence		.03	.49	.95	-.93	.99
	Justin Bieber		.39	.48	.43	-.57	1.34
	Wiz Khalifa		.52	.49	.29	-.45	1.49
	Christiano						
	Ronaldo		-1.19	.50	.02	-2.17	-.21
	Jenna Marbles		.17	.52	.74	-.86	1.20
	Bethany Mota		-.26	.56	.65	-1.35	.84
	Cameron Dallas		.30	.56	.59	-.80	1.40
	Tyler Oakley		.46	.54	.39	-.60	1.52
	Casey Neistat		.33	.56	.56	-.78	1.44
Cameron Dallas	Taylor Swift		.05	.46	.91	-.85	.95
	Rihanna		-.18	.46	.69	-1.08	.71
	Jennifer						
	Lawrence		-.27	.46	.56	-1.17	.64
	Justin Bieber		.09	.46	.85	-.81	.99
	Wiz Khalifa		.22	.47	.63	-.70	1.14
	Christiano						
	Ronaldo		-1.49	.47	.00	-2.42	-.56
	Jenna Marbles		-.13	.50	.80	-1.11	.85
	Bethany Mota		-.56	.54	.30	-1.61	.50

	Tyler Oakley	.65	.43	.13	-.19	1.49
	Casey Neistat	1.01*	.46	.03	.10	1.91
Rihanna	Taylor Swift	.05	.36	.89	-.66	.76
	Jennifer Lawrence	.08	.36	.83	-.63	.79
	Justin Bieber	1.20*	.36	.00	.50	1.91
	Wiz Khalifa	1.52*	.37	.00	.79	2.24
	Christiano Ronaldo	1.25*	.38	.00	.51	2.00
	Jenna Marbles	.49	.41	.23	-.31	1.30
	Bethany Mota	.39	.45	.39	-.50	1.28
	Eva Gutowski	.60	.48	.21	-.34	1.55
	Cameron Dallas	.87	.45	.05	-.02	1.76
	Tyler Oakley	.70	.43	.10	-.14	1.54
	Casey Neistat	1.05*	.46	.02	.15	1.96
Jennifer Lawrence	Taylor Swift	-.03	.36	.93	-.75	.69
	Rihanna	-.08	.36	.83	-.79	.63
	Justin Bieber	1.12*	.36	.00	.41	1.84
	Wiz Khalifa	1.44*	.38	.00	.70	2.17
	Christiano Ronaldo	1.17*	.38	.00	.42	1.93
	Jenna Marbles	.41	.41	.32	-.40	1.22
	Bethany Mota	.31	.46	.50	-.59	1.21
	Eva Gutowski	.52	.48	.28	-.42	1.47
	Cameron Dallas	.79	.46	.08	-.10	1.69
	Tyler Oakley	.62	.43	.15	-.23	1.47
	Casey Neistat	.97*	.46	.04	.07	1.88
Justin Bieber	Taylor Swift	-1.15*	.36	.00	-1.86	-.45
	Rihanna	-1.20*	.36	.00	-1.91	-.50
	Jennifer Lawrence	-1.12*	.36	.00	-1.84	-.41
	Wiz Khalifa	.31	.37	.40	-.42	1.04
	Christiano Ronaldo	.05	.38	.90	-.69	.79
	Jenna Marbles	-.71	.41	.08	-1.51	.09
	Bethany Mota	-.81	.45	.07	-1.70	.08
	Eva Gutowski	-.60	.48	.21	-1.54	.34
	Cameron Dallas	-.33	.45	.47	-1.22	.56
	Tyler Oakley	-.50	.43	.24	-1.34	.34
	Casey Neistat	-.15	.46	.74	-1.05	.75

Wiz Khalifa	Taylor Swift	-1.47 [*]	.37	.00	-2.20	-.74	
	Rihanna	-1.52 [*]	.37	.00	-2.24	-.79	
	Jennifer Lawrence	-1.44 [*]	.38	.00	-2.17	-.70	
	Justin Bieber	-.31	.37	.40	-1.04	.42	
	Christiano Ronaldo	-.26	.39	.50	-1.03	.50	
	Jenna Marbles	-1.02 [*]	.42	.02	-1.85	-.20	
	Bethany Mota	-1.12 [*]	.46	.02	-2.03	-.22	
	Eva Gutowski	-.91	.49	.06	-1.87	.05	
	Cameron Dallas	-.64	.46	.17	-1.55	.27	
	Tyler Oakley	-.81	.44	.06	-1.67	.05	
	Casey Neistat	-.46	.47	.32	-1.38	.46	
	Christiano Ronaldo	Taylor Swift	-1.20 [*]	.38	.00	-1.95	-.46
	Rihanna	-1.25 [*]	.38	.00	-2.00	-.51	
Jennifer Lawrence	-1.17 [*]	.38	.00	-1.93	-.42		
Justin Bieber	-.05	.38	.90	-.79	.69		
Wiz Khalifa	.26	.39	.50	-.50	1.03		
Jenna Marbles	-.76	.43	.08	-1.60	.08		
Bethany Mota	-.86	.47	.07	-1.78	.06		
Eva Gutowski	-.65	.49	.19	-1.62	.32		
Cameron Dallas	-.38	.47	.42	-1.30	.54		
Tyler Oakley	-.55	.44	.21	-1.43	.32		
Casey Neistat	-.20	.47	.68	-1.13	.73		
Jenna Marbles	Taylor Swift	-.45	.41	.28	-1.25	.36	
Rihanna	-.49	.41	.23	-1.30	.31		
Jennifer Lawrence	-.41	.41	.32	-1.22	.40		
Justin Bieber	.71	.41	.08	-.09	1.51		
Wiz Khalifa	1.02 [*]	.42	.02	.20	1.85		
Christiano Ronaldo	.76	.43	.08	-.08	1.60		
Bethany Mota	-.10	.49	.84	-1.07	.87		
Eva Gutowski	.11	.52	.83	-.91	1.13		
Cameron Dallas	.38	.49	.44	-.59	1.35		
Tyler Oakley	.21	.47	.66	-.72	1.13		
Casey Neistat	.56	.50	.26	-.42	1.54		
Bethany Mota	Taylor Swift	-.34	.45	.45	-1.23	.55	
Rihanna	-.39	.45	.39	-1.28	.50		

		Jennifer						
		Lawrence						
		Justin Bieber						
		Wiz Khalifa						
		Christiano						
		Ronaldo						
		Jenna Marbles						
		Bethany Mota						
		Eva Gutowski						
		Cameron Dallas						
		Casey Neistat						
	Casey Neistat	Taylor Swift						
		Rihanna						
		Jennifer						
		Lawrence						
		Justin Bieber						
		Wiz Khalifa						
		Christiano						
		Ronaldo						
		Jenna Marbles						
		Bethany Mota						
		Eva Gutowski						
		Cameron Dallas						
		Tyler Oakley						
Samsung	Taylor Swift	Rihanna						
		Jennifer						
		Lawrence						
		Justin Bieber						
		Wiz Khalifa						
		Christiano						
		Ronaldo						
		Jenna Marbles						
		Bethany Mota						
		Eva Gutowski						
		Cameron Dallas						
		Tyler Oakley						
		Casey Neistat						
	Rihanna	Taylor Swift						

	Rihanna		-0.55	.38	.15	-1.31	.20
	Jennifer Lawrence		-0.66	.39	.09	-1.42	.10
	Justin Bieber		-0.28	.38	.46	-1.04	.47
	Christiano Ronaldo		-0.33	.40	.42	-1.12	.47
	Jenna Marbles		-0.53	.43	.22	-1.38	.32
	Bethany Mota		-0.06	.48	.90	-1.00	.88
	Eva Gutowski		.03	.51	.95	-.96	1.03
	Cameron Dallas		-0.37	.48	.45	-1.32	.59
	Tyler Oakley		-0.88	.45	.05	-1.77	.01
	Casey Neistat		-0.44	.48	.36	-1.39	.51
Christiano Ronaldo	Taylor Swift		-0.37	.39	.34	-1.15	.40
	Rihanna		-0.23	.39	.56	-1.00	.54
	Jennifer Lawrence		-0.33	.40	.40	-1.11	.44
	Justin Bieber		.04	.39	.91	-.73	.81
	Wiz Khalifa		.33	.40	.42	-.47	1.12
	Jenna Marbles		-0.20	.44	.65	-1.07	.66
	Bethany Mota		.27	.49	.58	-.69	1.22
	Eva Gutowski		.36	.51	.48	-.65	1.36
	Cameron Dallas		-0.04	.49	.94	-1.01	.92
	Tyler Oakley		-0.55	.46	.23	-1.46	.35
	Casey Neistat		-0.12	.49	.81	-1.08	.85
Jenna Marbles	Taylor Swift		-0.17	.42	.69	-1.00	.66
	Rihanna		-0.03	.42	.95	-.86	.81
	Jennifer Lawrence		-0.13	.43	.76	-.97	.71
	Justin Bieber		.25	.42	.56	-.59	1.08
	Wiz Khalifa		.53	.43	.22	-.32	1.38
	Christiano Ronaldo		.20	.44	.65	-.66	1.07
	Bethany Mota		.47	.51	.36	-.53	1.47
	Eva Gutowski		.56	.54	.29	-.49	1.62
	Cameron Dallas		.16	.52	.75	-.85	1.18
	Tyler Oakley		-0.35	.49	.47	-1.31	.61
	Casey Neistat		.09	.52	.87	-.93	1.10
Bethany Mota	Taylor Swift		-0.64	.47	.17	-1.56	.28

	Rihanna		- .49	.47	.29	-1.42	.43
	Jennifer Lawrence		- .60	.47	.20	-1.52	.33
	Justin Bieber		- .22	.47	.63	-1.14	.70
	Wiz Khalifa		.06	.48	.90	-.88	1.00
	Christiano Ronaldo		- .27	.49	.58	-1.22	.69
	Jenna Marbles		- .47	.51	.36	-1.47	.53
	Eva Gutowski		.09	.57	.87	-1.03	1.22
	Cameron Dallas		- .31	.55	.58	-1.40	.78
	Tyler Oakley		- .82	.53	.12	-1.85	.22
	Casey Neistat		- .38	.55	.49	-1.47	.71
Eva Gutowski	Taylor Swift		- .73	.50	.14	-1.71	.24
	Rihanna		- .59	.50	.24	-1.56	.39
	Jennifer Lawrence		- .69	.50	.17	-1.67	.29
	Justin Bieber		- .32	.50	.52	-1.29	.66
	Wiz Khalifa		- .03	.51	.95	-1.03	.96
	Christiano Ronaldo		- .36	.51	.48	-1.36	.65
	Jenna Marbles		- .56	.54	.29	-1.62	.49
	Bethany Mota		- .09	.57	.87	-1.22	1.03
	Cameron Dallas		- .40	.58	.49	-1.53	.73
	Tyler Oakley		- .91	.55	.10	-2.00	.17
	Casey Neistat		- .48	.58	.41	-1.61	.66
Cameron Dallas	Taylor Swift		- .33	.48	.48	-1.27	.60
	Rihanna		- .19	.47	.69	-1.12	.74
	Jennifer Lawrence		- .29	.48	.54	-1.23	.65
	Justin Bieber		.08	.47	.86	-.85	1.02
	Wiz Khalifa		.37	.48	.45	-.59	1.32
	Christiano Ronaldo		.04	.49	.94	-.92	1.01
	Jenna Marbles		- .16	.52	.75	-1.18	.85
	Bethany Mota		.31	.55	.58	-.78	1.40
	Eva Gutowski		.40	.58	.49	-.73	1.53
	Tyler Oakley		- .51	.53	.34	-1.56	.53
	Casey Neistat		- .08	.56	.89	-1.18	1.02

Tyler Oakley	Taylor Swift	.18	.44	.69	-.69	1.05	
	Rihanna	.32	.44	.47	-.55	1.19	
	Jennifer Lawrence	.22	.45	.62	-.66	1.10	
	Justin Bieber	.59	.44	.18	-.28	1.46	
	Wiz Khalifa	.88	.45	.05	-.01	1.77	
	Christiano Ronaldo	.55	.46	.23	-.35	1.46	
	Jenna Marbles	.35	.49	.47	-.61	1.31	
	Bethany Mota	.82	.53	.12	-.22	1.85	
	Eva Gutowski	.91	.55	.10	-.17	2.00	
	Cameron Dallas	.51	.53	.34	-.53	1.56	
	Casey Neistat	.44	.53	.41	-.61	1.48	
	Casey Neistat	Taylor Swift	-.26	.48	.59	-1.19	.68
		Rihanna	-.11	.47	.81	-1.04	.82
Jennifer Lawrence		-.22	.48	.65	-1.15	.72	
Justin Bieber		.16	.47	.74	-.77	1.09	
Wiz Khalifa		.44	.48	.36	-.51	1.39	
Christiano Ronaldo		.12	.49	.81	-.85	1.08	
Jenna Marbles		-.09	.52	.87	-1.10	.93	
Bethany Mota		.38	.55	.49	-.71	1.47	
Eva Gutowski		.48	.58	.41	-.66	1.61	
Cameron Dallas		.08	.56	.89	-1.02	1.18	
Tyler Oakley		-.44	.53	.41	-1.48	.61	

Table 9: main experiment: multiple comparison for each brand*condition

Multiple Comparisons

LSD

Dependent Variable	(I) condition	(J) condition	Mean Difference (I-J)	Std. Error	Sig.
brand-self connection	social media celebrity_samsung	well-known	.47	.36	.19
		celebrity_samsung	.93*	.36	.01
		control group_samsung	.04	.35	.90
		well known celebrity_nike			

	control group_samsung	1.21*	.32	.00
	well known celebrity_nike	.46	.32	.15
	social celebrity_nike	.10	.32	.76
	control group_nike	1.18*	.34	.00
well-known celebrity_samsung	social media celebrity_samsung	-.72*	.32	.02
	control group_samsung	.49	.33	.14
	well known celebrity_nike	-.27	.32	.41
	social celebrity_nike	-.62	.32	.05
	control group_nike	.46	.35	.18
control group_samsung	social media celebrity_samsung	-1.21*	.32	.00
	well-known celebrity_samsung	-.49	.33	.14
	well known celebrity_nike	-.76*	.33	.02
	social celebrity_nike	-1.11*	.33	.00
	control group_nike	-.03	.35	.94
well known celebrity_nike	social media celebrity_samsung	-.46	.32	.15
	well-known celebrity_samsung	.27	.32	.41
	control group_samsung	.76*	.33	.02
	social celebrity_nike	-.36	.32	.26
	control group_nike	.73*	.35	.04
social celebrity_nike	social media celebrity_samsung	-.10	.32	.76
	well-known celebrity_samsung	.62	.32	.05
	control group_samsung	1.11*	.33	.00
	well known celebrity_nike	.36	.32	.26
	control group_nike	1.09*	.35	.00
control group_nike	social media celebrity_samsung	-1.18*	.34	.00
	well-known celebrity_samsung	-.46	.35	.18
	control group_samsung	.03	.35	.94
	well known celebrity_nike	-.73*	.35	.04
	social celebrity_nike	-1.09*	.35	.00

Table 10: main experiment: difference by using Nike or Samsung

Group Statistics

brand		N	Mean	Std. Deviation	Std. Error Mean
social media	Samsung	43	4.41	1.66	.25
celebrity_congruence	Nike	23	4.68	1.58	.33
well-known	Samsung	43	4.19	1.58	.24
celebrity_congruence	Nike	23	4.41	1.90	.40

Table 11: main experiment: difference by using Nike or Samsung

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
social media celebrity_congruence	Equal variances assumed	.00	.99	-.64	64.00	.52
	Equal variances not assumed			-.65	46.95	.52
well-known celebrity_congruence	Equal variances assumed	.88	.35	-.48	64.00	.63
	Equal variances not assumed			-.46	38.47	.65