The best match-up of airline advertising endorsement and flight safety message

Abstract

Purpose – This paper is to explore the effectiveness of children as advertisement endorsers in the airline context, including images of safety and reliability.

Design/methodology/approach – It is intended to assess the advertising effect of endorsers (celebrities, CEOs, experts, consumers, and children) in the airline industry context. A factorial experiment was conducted to test the communication effect (CE) of 10 groups of advertisement combinations (five endorser types × with/without safety attribute).

Findings – The results indicate that a child endorser yielded a better CE than celebrity, CEO, or typical consumer endorsers. Second, advertisements that emphasized safety had better CE than those without this emphasis. The group combining children and safety generated a better CE than most of the other groups comprising different combinations.

Practical implications – A child endorser and safety message are recommended to be used in advertisements for airlines because flight passengers place importance on safety. Fragile image of child reinforces safety of an airline.

Originality/value – The integration of advertising endorsement and message into a conceptual model allows the current results to provide meaningful theoretical and practical implications.

Keywords: airlines, child endorser, advertising, communication effect

Paper type Research paper

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Introduction

From the business standpoint, an airline company with a record of flight incidents tends to lose global competitiveness, and it requires much time and effort for the company to recover its image (Liou *et al.*, 2008; Squalli, 2009). For instance, the results of an investigation of the safety records of 19 major airlines in the Asia-Pacific region (Australia and New Zealand included) revealed that China Airlines (the leading airline company in Taiwan) had the highest accident rate, 7.16 accidents per million flights (AirSafe, 2002). This accident rate significantly affected consumer perception of China Airlines. Consequently, the airline organized and participated in several public activities to improve its image. These public activities made reference to concerns about environmental protection (China Airlines, 2012a), disadvantaged children (China Airlines, 2012b), and rescue efforts after the 2008 Wenchuan Earthquake. China Airlines also signed an endorsement contract with supermodel Chi-ling Lin in 2006 in an attempt to increase its profits.

Airline businesses employ celebrity endorsers in their advertising to guarantee the safety of their aircraft and to attract more customers. Celebrity endorsements are currently very common in the airline industry. To strengthen its global image, in 2012 Jeju Air announced a modeling contract with Big Bang, a South Korean musical group, and Virgin America employed the Spice Girls, a popular British pop group, as endorsers for its Los Angeles route in 2007. Paris-based fashion designer Karl Lagerfeld became the charity ambassador for traffic safety in 2008 (MING, 2008). The Ministry of Public Security, the People's Republic of China, once invited the famous Chinese actresses and athletes, Jiang Wenli and Li Xiaopeng, to be the endorser for traffic safety (Autohome.com.cn, 2014).

Several studies have confirmed that celebrity endorsements can provide clear financial benefits to a company (Farrell *et al.*, 2000; Siemens *et al.*, 2008). More importantly, celebrity

endorsements have intangible influences, which not only increase company revenue but also win additional value for company, brand, and product (Ali Shah and Akbar, 2008; Amos *et al.*, 2008; Knott and James, 2004).

Besides celebrities, other endorser types, such as CEOs, employees with expertise, and consumers, are considered effective by marketers and scholars (e.g., Kim *et al.*, 2013; Lin *et al.*, 2008; Stephens and Faranda, 1993; Wang and Doong, 2010; Wang *et al.*, 2002). However, there remains the question of how a brand determines the most productive advertisement endorser to increase the effectiveness of an advertisement.

In industries where safety is of great importance, the most vulnerable advertisement endorsement may be preferred because it presents the advertised product as durable and sturdy enough to protect the customer from external conditions. Thus, the vulnerability of children may fit the needs of advertisements for safety-sensitive industries. However, most previous studies have regarded children as receivers and target consumers (e.g., Carter *et al.*, 2011; Prell *et al.*, 2011), and few have explored the effectiveness of children as endorsers. To fill this research gap, this paper explores the best match-up for effective airline advertising. The objectives of this study are twofold: (1) to discuss the type of endorser with the highest advertising communication effect (CE); and (2) to examine whether a child endorser can be effectively matched with a safety message.

Literature review and hypotheses

Conceptualization

As the airline industry is very vulnerable to accidents, the safety issue is far more important than problems arising from other services or booking. If customers cannot be guaranteed safety, the effects of the advertising model will be weakened. Therefore, a good match between the endorser and the message to dissipate customers' safety concerns leads to a

greater amount of positive media coverage of the company and improved purchase behavior. It is true in some situations that consumers lack a certain amount of concrete knowledge and information, and this is particularly true in the hospitality industry, which is characterized by intangibility of services. Therefore, a consumer is likely to learn and obtain confirmation from the advertising model prior to making a final decision.

The results of the literature review and establishment of the hypotheses are incorporated into Figure 1. The model is rooted in the symbolic communication model, in which symbolic values are transferred to the brand or product when an endorsement with specific attribute(s) is (are) used in an advertisement. In the first stage shown in the figure, a mixture of meanings directly connected to modern cultural icons is transferred to an airline product when certain endorser types, such as celebrity, CEO, expert, typical consumer, and child, are used by the advertised airline company.

Though crew such as cabin crew have been used as advertisement endorsers by airlines like Korean Air and Etihad Airways, the most famous example being Singapore Airlines' Singapore Girl, this study did not include cabin crew as endorser/expert, mainly because, according to the Airline Safety Ranking report (2015) by the Jet Airliner Crash Data Evaluation Centre (JACDEC), the global leading airlines in terms of safety record are Cathay Pacific Airways, United Arab Emirates, Eva Air, Air Canada, and KLM. According to AirlineRatings.com's World's Safest Airlines data for 2015, four airlines achieved only one star for safety: Kam Air, Nepal Airlines, Scat, and Tara Air.

Most of the nine above-mentioned airlines, no matter their safety record, use their cabin crew as endorsers. The discriminant effect of cabin crew as endorser for safe and unsafe record airlines is unclear. Bearing this in mind, and in consideration of professional and aviation safety, this study then uses the pilot as the expert. Here "typical consumer" denotes the general consumer rather than persons with high status or wealth. The multiple factors that can influence

flight customer satisfaction include price (Expedia, 2014; Gao and Koo, 2014; Jou *et al.*, 2008a, 2008b), services (Chiou and Chen, 2012; Jou *et al.*, 2008a, 2008b; Park *et al*., 2004), and scheduling (Brey and Walker, 2011). However, it has been found that customers indicate safety as their most important concern in choosing an airline (Expedia, 2015; Gao and Koo, 2014; Jou *et al.*, 2008a; Squalli, 2009). Meanwhile, the safety attribute, the most important product attribute, is conveyed through information emphasizing flight safety.

The next stage in the figure is airline advertising, which stimulates consumer perceptions of the advertisement, attitudes toward the brand, and purchase intentions. The role of endorsers is especially augmented in a situation in which safety is the most influential factor in decision-making. Endorsements also have a substantial influence on the purchasing behavior of customers who have limited information or lack flight experience (low involvement with the product) because the endorser's recommendation lends credence to the trust bestowed by customers upon the airline (Petty *et al.*, 1983).

Figure 1 Here

Hypotheses for testing endorser types and CE

Advertising is one of the most important mediums in enhancing sales and heightening product or service brand in a market. The advertising effect can be divided into sales effect and CE. The sales effect measures the increase or decrease of sales, but it is an inefficient standard by which to reflect the advertising effect, for two reasons. First, the expected sales effect of advertising may not occur in the short term (Lavidge and Steiner, 1961); second, other factors, such as market promotion, incentives, and pricing, are involved in the increase or decrease of sales (Chung *et al.*, 2013). CE assesses how advertising affects the attitude and behavior of message receivers. It measures the advertising effect more effectively because of its simplicity,

and has thus been preferred in research (Kim *et al.*, 2013; Schiffman and Kanuk, 2001; Wang *et al.*, 2002).

CE refers to changes in attitudes and intentions after the stimulation of advertisements, which include consumer attitudes toward the advertisement (AA), attitudes toward the brand (AB), and purchase intentions (PI) (Schiffman and Kanuk, 2001). In focusing on CE (Edell and Burke, 1984; Lafferty and Goldsmith, 1999; Mackenzie and Lutz, 1989), scholars have identified that when exposed to an advertisement, consumers generate positive feelings. These feelings could affect consumer attitude toward the product and brand (Huber *et al*., 2013), and may even increase purchase intention.

However, the question remains as to which kind of endorser offers the most effective CE. The answer may vary depending on the context. Previous studies have attempted to identify the effectiveness of endorsers in advertisements (Chang *et al.*, 2005; Freiden, 1984; Friedman and Friedman, 1979; Hsieh and Chang, 2005; Kim *et al.*, 2013, 2014; Lin *et al.*, 2008; Stafford, 1998; Wang *et al.*, 2002; Wang and Doong, 2010). For instance, Friedman and Friedman (1979) studied celebrity, expert, and typical consumer endorsers, and found that a celebrity spokesperson was more effective for products high in psychological or social risk, which involve elements such as good taste, self-image, and evaluation by others. Some research has considered the CEO as another typical endorser type (Freiden, 1984; Kim *et al.*, 2013; Rubin *et al.*, 1982; Wang *et al.*, 2002).

Types of advertisement endorsement shed an image of credibility that positive affects attitude toward the product advertised (Kamins and Gupta, 1994; Magnini *et al.*, 2008; Siemens *et al.*, 2008). As endorsers perceived as trustworthy spokesmen have inherent attributes such as expertise, attractiveness, and trustworthiness, their image is an underpinning component determining the success of an advertisement. However, the image of a child endorser obviously differs from that of an adult endorser (e.g., celebrity, CEO, expert, or typical consumer) because children are immature and rely on the supervision and protection of adults (Annemie, 2008;

Muntarbhorn, 1998). In most advertising research, children have been considered information receivers and marketing targets. Thus, the effectiveness of children as endorsers remains unclear. However, the business world has already widely adopted child endorsers in advertisements for toys (e.g., Lego), milk powder (e.g., Nestlé), and cars (e.g., Mercedes-Benz Smart). Therefore, comparing the advertising effectiveness of children with that of other endorser types is justifiable. Hence, we propose hypotheses *H1a*, *H1b*, and *H1c*:

H1a. Subjects' attitudes toward the advertisement will be significantly better when they see airline advertisements featuring a child endorser rather than other endorser types (celebrity, CEO, expert, and typical consumer).

H1b. Subjects' attitudes toward a brand will be significantly better when they see airline advertisements with a child endorser rather than other endorser types (celebrity, CEO, expert, and typical consumer).

H1c. Subjects' purchase intentions will be significantly higher when they see airline advertisements with a child endorser rather than other endorser types (celebrity, CEO, expert, and typical consumer).

Hypotheses for testing product attributes

One of the most effective strategies for differentiation is creating an irreplaceable brand image that contains the three key elements of product attributes, consumer benefits, and brand personality (Aaker, 1991). Product attributes indicate consumer perceptions of a product. Consumers regard a product as a combination of product attributes. When purchasing products, consumers are buying interests brought by product attributes. However, individual consumers desire different attributes. In some cases, a single attribute determines purchase behavior (Payne, 1976); in other cases, multiple attributes determine purchase behavior (Fishbein, 1963). Product attributes consist of both tangible and intangible attributes. In fact, as products become more similar

and difficult to compare, intangible attributes become more important in consumer purchase decisions (Auger *et al.*, 2010).

Safety is clearly an intangible attribute, and airlines' safety record and credibility are crucial when customers are selecting an airline company (Squalli, 2009). Jou *et al.* (2008b) regarded safety as the most significant factor in service quality. In a similar vein, Chen *et al.* (2012) developed the concept of airline social responsibility and examined its perceived importance and performance in the Taiwanese airline market. They found that safety was the most important concern of customers, followed by consumer rights, environmental protection, and social participation. Gilbert and Wong (2003) identified the seven service dimensions that mattered most to airline passengers: reliability, assurance, facilities, employees, flight patterns, customization, and responsiveness. Respondents consistently ranked assurance, which includes safety or security items, as the most important service dimension. Therefore, the safety of an airline is of pivotal importance for overseas tourists. Based on the discussion of product attributes and the importance of airlines' safety attributes, hypotheses *H2a*, *H2b*, and *H2c* are derived as follows:

H2a. Subjects' attitudes toward an advertisement will be significantly better when it has an emphasis on safety.

H2b. Subjects' attitudes toward a brand will be significantly better when they see airline advertisements with an emphasis on safety.

H2c. Subjects' purchase intentions will be significantly higher when they see airline advertisements with an emphasis on safety.

Hypotheses for testing match-up theory

The match-up hypothesis in advertising research provides an understanding of how the perceived match-up of two alliance partners affects consumer attitude and their evaluation of the

alliance (Fink *et al.*, 2012; Kahle and Homer, 1985; Kamins, 1990; Lynch and Schuler, 1994; Solomon *et al.*, 1992). This hypothesis helps evaluate and explain which endorser type is most effective for a product or service and which is the most influential for consumers. This hypothesis also suggests that endorsers are more effective when there is a "fit" between endorsers and products, which, in turn, could lead advertisements to improve brand attitude and purchase intentions (Agrawal and Kamakura, 1995; Boyd and Shank, 2004; Till and Busler, 2000).

The effects of match-up hypothesis can be explained by associative learning theory, which evaluates how links or associations between relatively unconnected pieces of information can be formed (Fink *et al.*, 2012; Till and Busler, 2000). According to this theory, when exposed to advertisements, consumers are able to recall relevant but unconnected information and make associations and linkages. For instance, after watching a celebrity endorser in an advertisement, people might form a strong link between the attractiveness of the celebrity and the product endorsed. In other words, the effectiveness of a celebrity is supplemented by a transfer of the positive effect from the celebrity to the product (Stallen *et al.*, 2010; Yen and Teng, 2012).

The vulnerability and cuteness of children are desirable for some brands and products. In a Mercedes-Benz advertisement, the image of a boy conveys the safety features of the product, and the slogan highlights, "As children grow, one thing should stay the same – their safety." Thus, the vulnerability of children is probably a good match-up for safety-sensitive airline companies.. From the above discussion, we draw the following hypotheses:

H3a. Subjects' attitudes toward an advertisement will be significantly better when a child endorser is combined with the safety attribute rather than other combinations.

H3b. Subjects' attitudes toward a brand will be significantly better when a child endorser is combined with the safety attribute rather than other combinations.

H3c. Subjects' purchase intentions will be significantly higher when a child endorser is combined

with the safety attribute rather than other combinations.

Methodology

Experiment design

Several researchers have pointed out that a better result can be generated when the experimental design approach is adopted in gauging advertising effectiveness (Baker and Churchill, 1977; Chowdhury *et al.*, 2008; Kim *et al.*, 2014; Till and Shimp, 1998; Wang *et al.*, 2002; Wang *et al.*, 2007; Woodside, 1990). Therefore, this study conducted a factorial experiment that examined the main effects of a single factor and the interaction effects of multiple factors. There were 10 experimental groups (celebrity, CEO, expert, typical consumer, and child, each with and without an emphasis on safety) (Table I).

This study used 8.5"×11" print advertisements with a 2"×3" photo of the endorser in the upper left of the page. A caption indicating the type of endorser was also provided under the photo to serve as a reference for the experimental subjects. The basic layout of the advertisements was the same for all 10 experimental groups, except for the endorser photos, descriptions, and information that emphasized safety in the 10 advertisements. Only male endorsers were shown because the gender of endorsers can affect attitudes toward advertisements (Baker and Churchill, 1977; Joseph, 1982; Lin *et al.*, 2008; Wang *et al.*, 2002), which would affect the results. This study thus attempted to control the effect of gender on perception of advertising by selecting the advertisements.

Table I here

To ensure the accuracy of the descriptions of the airline with the high safety credibility, 50 graduate students majoring in hospitality management in Taiwan were asked to select the most appropriate descriptions (ranking them 1 to 5). Most participants in this procedure were aged 30 to 40, and were employed persons who could afford air travel. Five descriptions were taken from

relevant articles and literatures, such as: "*Z Airlines was awarded the Tenth Best Safety Airline in the World by AERO International*" and "*Z Airlines won the 60th Richard Teller Crane Founder's Award of the Flight Safety Foundation in the US.*" Finally, the description with the highest means (high safety credibility) were used as the stimulus when the advertisements were designed (Wang *et al.*, 2002).

Fifty graduate students were asked to select the most appropriate endorser types and photos. For example, to select the celebrity endorsement, three different types, including supermodel, actor, and athlete, were included. Once a type was decided (here, a supermodel was selected), photos of five different supermodels were further offered for selection. Previous research has indicated that a physically attractive model produces a higher tendency in favorable attitude toward a brand or intention to buy than an unattractive model (Amos *et al.*, 2008; Atkin and Block, 1983; Baker and Churchill, 1977; Joseph, 1982; Yen and Teng, 2012). Photos of the five supermodels were ranked by the respondents according to their preference. According to mean values calculated for each of the five photos, the ranking was made. The photo with the highest mean was selected. Subsequently, in order to test interjudge reliability among the above three models, the Kendall coefficient of concordance (W) was calculated. The results were considered to be acceptable, showing a W of 0.405 ($p<0.01$), 0.317 ($p<0.01$), and 0.454 ($p<0.01$).

Other endorsers are CEO, which is as an existing president of an airline company; expert, which is as a professional pilot; and consumer, which is a businessman-style consumer who often takes flights. A child endorser is under 2 years old, in accordance with the Taiwanese Ministry of Health and Welfare's (2003) definition in the Protection of Children and Youths Welfare and Rights Act.

Items were formulated to determine attitude toward the ad (AA) ("*Please respond with your attitude toward the advertisement*"), attitude toward the brand (AB) ("*Please respond with your attitude toward Z Airlines*"), purchase intention (PI) ("*Please answer the level of intention to take*

Z Airlines flights"). The items are similar to other studies on endorsement effects (Chang *et al.*, 2005; Hsieh and Chang, 2005; Kim *et al.*, 2013; Wang *et al.*, 2002; Wang *et al.*, 2007). AA, AB, and PI were measured with 7-point bipolar scales as in other studies (Lafferty and Goldsmith, 1999; Wang *et al.*, 2007).

After reading the advertisements, the subjects were asked to complete a three-part questionnaire that included CE, social desirability (SD), and yes-saying (YS) bias, and personal information and perception of the advertisement. CE was measured by asking the subjects to rate their impression (AA and AB) of the advertised Z Airlines flights, and the likelihood that they would take Z Airlines flights (PI).

Past study has indicated that SD and YS biases can submerge in a situation that in filling in the questionnaire, subjects forcefully request the reliability and validity of the other measures (Bagozzi and Baumgartner, 1994). The subjects were required to provide personal information, including sex, age, and previous flight experience. Finally, to reduce the effects of pre-existing knowledge and other effects due to prior exposure or familiarity, which could create bias in the subjects' responses and invalidate the results (Till and Shimp, 1998; Wang *et al.*, 2007), two questions were requested to identify whether subjects had been exposed to the advertisement before or were familiar with the endorsers depicted in the advertisement.

Before the data collection, a small-scale pre-test was conducted using a group of 50 respondents in order to check for any potential problems. Reflecting their responses and comments, meticulous revisions were implemented to raise the understandability of the questionnaire items.

Data collection

A random sampling method was applied in this experiment, which has been used in previous studies in the hospitality customer behavior context (Gall *et al.*, 2006; Harrison, 1979; Kamins, 1990; Kim *et al.*, 2013). First, samples were randomly assigned to each of the 10

combination groups in a seminar designed to deliver a lecture about career development. The gender ratio was controlled to be equal in order to avoid gender bias (Kamins, 1990). Harrison (1979) insisted that at least 30 subjects, with 20 subjects per group, are necessary for an experimental study, whereas Gall et al. (2006) considered 15 subjects a minimum for causal comparison and experimental research. In this study's experiment, 10 groups of 50 subjects were created, thus providing a sample of 500 subjects. One questionnaire containing one endorsement was assigned to each subject by number (Groups 1, 2, 3, 4, … , 10).

Of the 500 questionnaires distributed, 480 were collected. Sixty-seven were excluded due to multiple incomplete answers or familiarity with the endorser in the photo. Four hundred thirteen questionnaires were used for further analyses. Among the 413 subjects, 34 were from experimental group 1; 43 from experimental group 2; 40 from experimental group 3; 43 from experimental group 4; 50 from experimental group 5; 48 from experimental group 6; 27 from experimental group 7; 44 from experimental group 8; 45 from experimental group 9; and 39 from experimental group 10. Regarding the respondents' profiles, 50.8% were female, 75.6% were middle aged, 30% had overseas flight experience, 51% had only domestic flight experience, 71.0% were company workers, 80% of them lived in Teipei, and all were high school graduates or more educated.

Results

Results of testing the CE of the endorser types

The results of a Pearson correlation analysis revealed that in the pretest and the large-scale test, no significant relationship was observed between SD and CE or between YS and CE. Thus, the measurement of CE was not tainted by SD or YS bias. This study did not use random sampling but conducted Pearson's chi-square test to check the homogeneity of the experimental subject groups. We found the homogeneity of these groups to be highly satisfactory. Pearson's chi-square test was then used to examine whether CE differed between company worker and

non-company worker subjects. No significant difference (Pearson's chi-square value=92.176; degrees of freedom=84; p=0.254) was observed in CE between company worker and non-company worker subjects, indicating that the experimental results could be applied to the public. A Pearson correlation analysis was also used to test the correlation rate between AA, AB, and PI. The results showed that AA, AB, and PI all correlated with each other.

A series of one-way ANOVA tests were conducted to examine the significant differences between endorsement types on attitude toward an ad (AA), attitude toward a brand (AB), purchase intention (PI), and communication effect (CE). Before interpreting the results of the one-way ANOVAs, it is necessary to investigate the assumption of the equal variances across five endorser types by conducting Levene's tests. Since the values of the Levene's test statistics were not significant for all four ANOVA models, the assumption of homogeneity of variance was not violated. The findings of the one-way ANOVA tests revealed significance at the .001 level for all four dependent variables. When significant differences in one-way ANOVA tests at the .001 level were noticed, Scheffé's tests were employed to examine the source of the differences across the five endorsement groups.

According to the outcomes of Scheffé's tests, consumers' AA was significantly higher when they were exposed to a child than to a celebrity or a CEO endorser. The child endorser led to more positive AB than did other types of endorsers. The child endorser also generated more positive PI than a celebrity or a CEO endorser. Next, Scheffé's test of CE showed that a child endorser created more positive CE as a whole than did the celebrity, CEO, or typical consumer endorsers (Table II). Therefore, *H1b* was supported, and *H1a* and *H1c* were partially supported.

Table II here

Results of testing the CE of safety attributes

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The results of *t*-tests showed AA and AB to be significant at the .05 level, and PI and CE at the .01 level. These results supported the idea that print advertisements with an emphasis on safety are more effective than print advertisements without this emphasis (Table III). Therefore, H2a, H2b, and H2c were all supported.

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Results of testing the CE of the experimental groups

The results of Levene's tests indicated that the value of the Levene test statistic is less than the critical threshold. Thus it indicated that there is no worry about the assumption of homogeneity of variance. The findings of the one-way ANOVA tests showed significance at the .001 level for all four dependent variables. As a post ANOVA test, Scheffé's tests were introduced to examine the sources of the differences across the five endorsement groups. The results of Scheffé's tests on the 10 combination groups (endorser×with/without emphasis on safety) showed that the AA of group 9 (child×emphasis on safety attribute) was higher than that of groups 1, 2, 3, 4, 8, and 10. The subjects in group 9 showed higher AB than did those of groups 1, 2, 3, 4, 5, 8, and 10. The PI of group 9 was significantly higher than that of groups 2, 3, and 8. In addition, group 9 had better CE than groups 1, 2, 3, 4, 5, 6, 8, and 10. As a result, H3a, H3b, and H3c were partially supported. To examine whether the gender and previous flight experience of the subjects affected AA, AB, and PI, two-tailed *t*-tests were applied. Gender and previous flight experience did not significantly affect AA, AB, or PI. The detailed results are shown in Table IV.

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Conclusions and implications

The findings of this study can be summarized as follows. First, the CEO endorser was less effective than a child or expert in advertisements for airline companies. This result is very intriguing since it is believed that a CEO is a suitable endorser to convey such attributes as representativeness, credibility, reliability, and dependability to consumers. Therefore, the depiction of a CEO of a big company on promotional materials should relay trustworthiness in a product or business (Amos *et al.*, 2008; Brownell and Reynolds, 2002; Ketchen Jr. *et al.*, 2008; Leeman and Reynolds, 2012; Lord and Putrevu, 2009; Rubin *et al.*, 1982; Tripp *et al.*, 1994; Wang *et al.*, 2002). However, just one airplane accident can be catastrophic, causing loss of passenger life and devastation, and can thus lead to a loss of brand power, a drastic decrease in passenger numbers, and a management crisis. Thus, a consumer is unlikely to be convinced by a CEO who represents the benefits of shareholders through effective management of yield. This is consistent with other studies that have reported the ineffectiveness of CEO endorsements due to the CEO being above all an active advocate for the company's profit (Folkes, 1988; Mowen and Brown, 1981; Rubin *et al.*, 1982; Tripp *et al.*, 1994).

Second, the finding that the CEO endorser was not the most effective can be confirmed by attribution theory, according to which consumers show a tendency of making internal attributions for favorable results but external attributions for unfavorable results (Kim *et al.*, 2013; Till and Busler, 2000; Wang *et al.*, 2010). That is, consumers tend to believe that the CEO of an airline advertises to boost his or her profits rather than to stand up for consumer benefits such as safety or prevention of lost or damaged luggage. This leads to the belief that a CEO's words or visual exposure in advertising materials are not enough to transfer his or her attributes to customers through the medium of advertising and ultimately to convince potential customers.

Third, according to the results of this study, a customer endorser was less effective than a child or expert. This finding is at odds with several studies that indicate the effectiveness of a customer as an advertisement endorser (Hill and Gandhi, 1992; Mortimer and Mathews, 1998;

Pringle and Binet, 2005; Stafford *et al.*, 2002). As a customer can experience hospitality products, assess quality, and evaluate satisfaction; their actual experience can encourage or discourage others from taking a flight. In the severe competition between airline companies, customer comments serve as a guide to choosing the best airline. However, it is very interesting that the effect of a customer endorser as an advertisement model was not substantial in the airline industry context. In the case of an airline, which is directly linked to customer life and death, the influence of customer recommendations to take an airline is likely to be dissipated because consumer recommendations can help potential customers to understand cabin or front desk services, but cannot guarantee safety.

Fourth, the findings of this study can be compared to hundreds of previous studies that have confirmed that celebrity endorsements can enhance advertising effectiveness in raising brand image, brand loyalty, and intention to purchase (e.g., Atkin and Block, 1983; La Ferle and Choi, 2005; Kamins, 1989, 1990; Kim *et al.*, 2014; Mowen and Brown, 1981). Many studies have stressed the importance of endorsers' attractiveness in terms of beauty, sex appeal, dress and accessories, physical appearance, elegance, manners, and etiquette for a company's image (Amos *et al.*, 2008; Gakhal and Senior, 2008; Kim *et al.*, 2014; Lord and Putrevu, 2009; Magnini *et al.*, 2010). However, celebrities may fail to attract consumer interest or trust because physical features or images may not be transferrable from the celebrity to the product or company they endorse and, as a consequence, may affect consumer attitudes toward the company.

Fifth, according to the findings of this study, the child endorser had the most significant effect on the CE of the advertisement, which is very interesting. This is attributed to the belief that when a company works with a celebrity endorser, it invests a significant amount of money on aligning its brands and organizations with that celebrity, who presents attributes such as trustworthiness, attractiveness, expertise, and likeability. In a company situation, adopting a celebrity as an advertisement endorser can be astronomically expensive. Using a child as an advertising model for an airline drastically reduces advertisement costs.

Sixth, external clues such as a company's brochure, website, or advertisements help shape consumer perceptions of product quality or reduced risk in choosing a product from various choices (Dean, 1999; Dean and Biswas, 2001; Lafferty and Goldsmith, 1999; Wang *et al.*, 2002). For example, Wang *et al.* (2002) indicated that along with the role of the advertising endorsement, the manifestation of product attributes is a decisive force in consumers' search for information. In Lafferty and Goldsmith's (1999) study, the results of the present study indicate that airline advertisements with an accompanying safety message can reduce the concern of consumers worried about the risk of flying with an airline with a dubious accident record, and thus can have a better CE. Consequently, in practice, airline marketers should emphasize the guarantee of safety in their advertisements.

Seventh, the child endorser×safety attribute group (9) produced a significantly better CE than most of the other endorser×attribute groups (1, 2, 3, 4, 5, 6, 8, and 10). There is thus a good match-up between the child endorser and the safety attribute. These findings support Paivio's (1986) dual-code theory, which proposed that the addictive effects of collaborative advertisements using more than one medium result in memory storage and favorable attitude. Therefore, these findings are also backed up by past empirical studies (Kim *et al.*, 2013; Wang *et al.*, 2002; Wang and Doong, 2010). As a consequence, advertisements combining both child endorser and emphasized safety message are expected to have greater effectiveness in communicating with customers.

Theoretical implications

Advertising is one of the most efficient tools for companies to convey persuasive information to the public because this information can aid in creating brand image, help consumers to develop an awareness of products, generate positive attitudes toward brands, and ultimately affect purchase behavior (Huber et al., 2013). Selection of an appropriate endorser type is decisive for the success of a product or brand because an appropriate endorser type can create a favorable impression, reinforce trust among consumers, and increase sales. Thus, results of this study provide

a new approach to find an appropriate endorser type and to maximize the match-up between endorser and product attributes.

Practical implications

In conclusion, this study provides useful information for managers and scholars interested in the CE of airline advertisements. This study recommends that a child endorser be used, particularly in advertisements for airlines. The safety of the airline company should also be emphasized. Booking occurs prior to taking a flight. Foreign tourists may not be aware of the history or characteristics of a certain airline. Thus, when a reservation is required without prior experience with an airline, messages on related websites, blogs, word of mouth, and promotional brochures can guide a customer's choice (Zhang *et al.*, 2010). A trustworthy advertisement also functions to confirm brand credibility and assure the product's quality rather than dissipate negative attitudes toward the company (Gilchrist, 2005; Ketchen Jr. *et al.*, 2008; Till and Busler, 2000).

Limitations and future research

This study has some limitations. It has identified the effect of messages and endorsement on promotional brochures. However, different advertising media or communication types can lead to different outcomes (Amos *et al.*, 2008; Chen and Hsieh, 2012). Therefore, future studies should be expanded to include various commercial media such as TV and the Internet. Second, to avoid gender bias of endorser types in this study, only male endorsers were shown in the experimental advertisements. The CE of female endorsers may differ from that of male endorsers in airline advertisements, and this issue is worth considering in future research.

Third, this study did not analyze the potential difference in the effects of advertisements on various customer demographic characteristics. Therefore, future study should compare the effects of endorsement and message on different demographic cohorts because different customers may show preferences for different endorsements. For example, perception of advertisement

effectiveness can differ between genders (Baker and Churchill, 1977; Boyd and Shank, 2004; Freiden, 1984; Joseph, 1982; Lin *et al.*, 2008). Therefore future study is needed to analyze findings among both males and females.

Fourth, other factors such as price or services can be included in advertisements' message (Chiou and Chen., 2012; Expedia, 2014; Gao and Koo, 2014; Jou *et al.*, 2008a, 2008b). Though this study assessed the influence of safety on respondents' attitude, future study is needed to identify the effect of other influential factors. Additionally, future studies should empirically identify whether the findings consistent with those of studies in other countries and cultures because the roles of endorsers or the efficacy of messages can fluctuate according to interpretations of cultural meanings (McCracken, 1989; Parulekar and Raheja, 2006; Wang *et al.*, 2002).
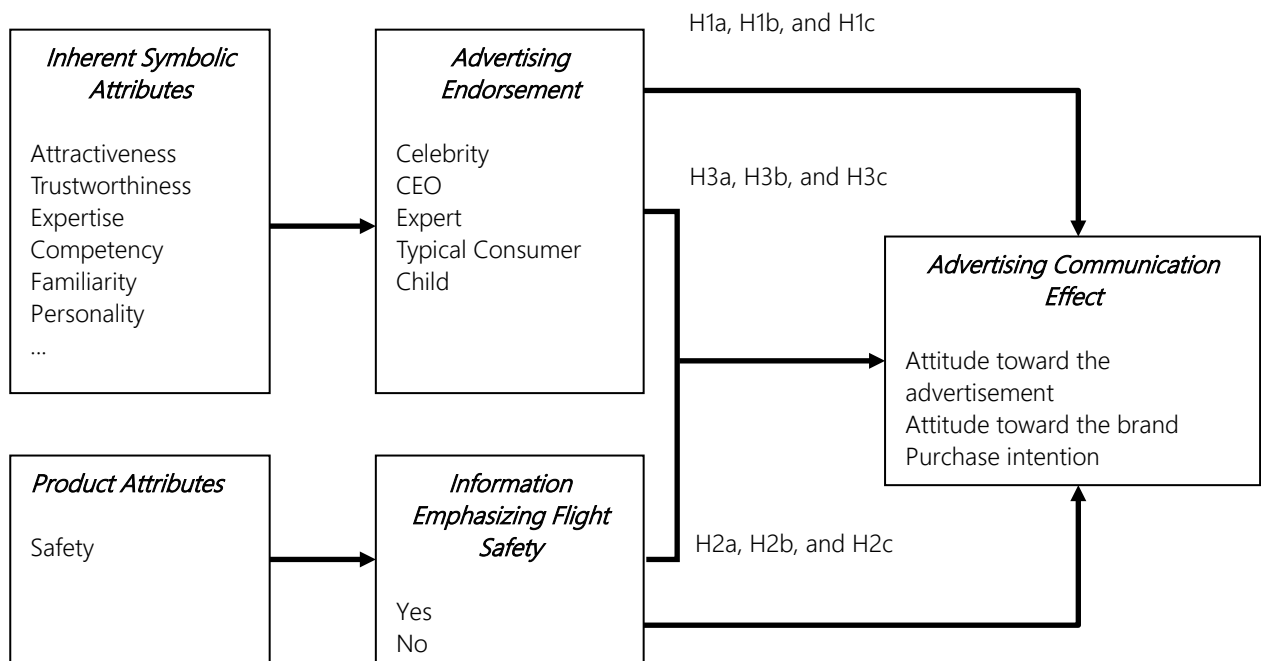
Figure 1. Conceptual framework

Table I. Combinations of the experimental groups

Experimental group	Endorser	Safety attribute
Group 1	Celebrity	Yes
Group 2	Celebrity	No
Group 3	CEO	Yes
Group 4	CEO	No
Group 5	Expert	Yes
Group 6	Expert	No
Group 7	Consumer	Yes
Group 8	Consumer	No
Group 9	Child	Yes
Group 10	Child	No

Table II. Communication effect of endorser types

Dependent variables	Endorser	Number	Mean	Result
Attitude toward the ad (AA)	Celebrity	77	4.03	Child>Celebrity*
	CEO	83	3.91	Child>CEO**
	Expert	98	4.26	
	Consumer	71	4.13	
	Child	84	4.59	F-value=5.107 (p=.001)
	Total	413	4.19	
Attitude toward the brand (AB)	Celebrity	77	3.78	Child>Celebrity**
	CEO	83	3.90	Child>CEO*
	Expert	98	3.99	Child>Expert*
	Consumer	71	3.88	Child>Consumer*
	Child	84	4.51	F-value=5.780 (p=.000)
	Total	413	4.02	
Purchase intention (PI)	Celebrity	77	3.37	Child>Celebrity*
	CEO	83	3.37	Child>CEO*
	Expert	98	3.64	
	Consumer	71	3.51	
	Child	84	4.06	F-value=3.903 (p=.004)
	Total	413	3.60	
Communication effect (CE)	Celebrity	77	3.73	Child>Celebrity**
	CEO	83	3.74	Child>CEO**
	Expert	98	3.97	Child>Consumer*
	Consumer	71	3.85	
	Child	84	4.40	F-value=6.365 (p=.000)
	Total	413	3.95	

Note: * indicates $p<0.05$, ** indicates $p<0.01$.

Table III. Communication effect of safety attributes

Dependent variables	Attribute	Number	Mean	Result
Attitude toward the ad (AA)	With	196	4.33	With>Without*
	Without	217	4.06	T-value=2.542 (p=.011)
	Total	413	4.19	
Attitude toward the brand (AB)	With	196	4.14	With>Without*
	Without	217	3.91	T-value=2.033 (p=.043)
	Total	413	4.02	
Purchase intention (PI)	With	196	3.79	With>Without**
	Without	217	3.43	T-value=2.699 (p=.007)
	Total	413	3.60	
Communication effect (CE)	With	196	4.09	With>Without**
	Without	217	3.81	T-value=2.759 (p=.006)
	Total	413	3.95	

With=with emphasis on safety; Without=without emphasis on safety.

Note: * indicates $p<0.05$, ** indicates $p<0.01$.

Table IV. Communication effect of the experimental groups

Dependent variables	Group	Number	Mean	Result
Attitude toward the ad (AA)	Group 1	34	3.94	G9>G1*
	Group 2	43	4.09	G9>G2*
	Group 3	40	3.83	G9>G3**
	Group 4	43	3.98	G9>G4**
	Group 5	50	4.31	G9>G8**
	Group 6	48	4.20	G9>G10*
	Group 7	27	4.42	
	Group 8	44	3.95	F-value=4.930 (p=.000)
	Group 9	45	5.04	
	Group 10	39	4.07	
	Total	413	4.19	
Attitude toward the brand (AB)	Group 1	34	3.75	G9>G1**
	Group 2	43	3.80	G9>G2**
	Group 3	40	3.81	G9>G3**
	Group 4	43	3.99	G9>G4*
	Group 5	50	3.85	G9>G5**
	Group 6	48	4.14	G9>G8**
	Group 7	27	4.27	G9>G10*
	Group 8	44	3.65	
	Group 9	45	4.98	F-value=5.710 (p=.000)
	Group 10	39	3.97	
	Total	413	4.02	
Purchase intention (PI)	Group 1	34	3.59	G9>G2*
	Group 2	43	3.20	G9>G3*
	Group 3	40	3.18	G9>G8*
	Group 4	43	3.56	
	Group 5	50	3.70	
	Group 6	48	3.58	
	Group 7	27	3.98	F-value=3.877 (p=.000)
	Group 8	44	3.23	
	Group 9	45	4.47	
	Group 10	39	3.60	
	Total	413	3.60	
Communication effect (CE)	Group 1	34	3.76	G9>G1**
	Group 2	43	3.71	G9>G2**
	Group 3	40	3.63	G9>G3**
	Group 4	43	3.86	G9>G4**
	Group 5	50	3.94	G9>G5*
	Group 6	48	3.99	G9>G6*
	Group 7	27	4.23	G9>G8**
	Group 8	44	3.61	G9>G10*
	Group 9	45	4.84	
	Group 10	39	3.89	F-value=6.162 (p=.000)
	Total	413	3.95	

Note: * indicates $p<0.05$, ** indicates $p<0.01$.

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