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„The Battle of The Expert and The Star: A Comparison
Study of Key Opinion Leaders and Celebrities Endorsement
Effectiveness On Purchase Intentions”

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Introduction

In the last few years, there has been a growing interest in the new era of media such as YouTube, Facebook and Instagram. These new forms of media differ from traditional media such as television, radio and newspaper. Progress plays an important role in the rise of new public figures on the media landscape for instance bloggers, video bloggers ('vlogger'), and Instagram influencers. These social media creators gained fans, who are called followers or subscribers. The decline of the traditional celebrity in social media marketing is evidenced by Nielsen Company's survey in 2011 which indicates that 20% of women social media users are motivated to consider products or services that are promoted by a well-known blogger, despite the fact only 13% of women are influenced by celebrity endorsement. As reported by this survey, 53% of the United States' female blog readers have been influenced to make a purchase as a result of blog recommendations. Another survey led by Variety (2014) demonstrates that YouTube vloggers secured more likes than traditional celebrities, in which 10 out of 20 YouTube vloggers surveyed managed to lead in a popularity score.

Quite recently, considerable attention has been paid to the advancement of technology where consumers tend to become more information-savvy. At the present time, people are more critical on any circulated information and are neither easily controlled nor manipulated. Consequently, as opposed to simply accepting any form of advertising and endorsement, consumers have a tendency to put more trust on a figure that appears to be similar or related to them. This study aims to give a comprehensive account on the effectiveness of key opinion leaders on motivating the consumer attitude and purchase intention. There are still some interesting problems to be addressed in which previous studies do not take into account gender choice, quantitative experiment method for data collection and identifying the comparison of these two types of endorsement in different types of goods such as search and experience goods.

Hence, the objective of this research is to propose a new technique on selecting the appropriate endorser for an organization, considering that the right decision will be directed to an effective budget and resource allocation.

Research question: How do key opinion leaders motivate consumer purchase intentions in search and experience goods compared to celebrities for both men and women?

Literature Review

Opinion Leadership and Its Characteristics

Rogers & Cartano (1962), King & Summers (1970), and Flynn *et al.* (1996) described opinion leadership as one's behavioral tendency and ability to influence the purchase decisions of others. Another description is portrayed where opinion leaders are defined as the individuals with a wide set of personal connections, who play key influential roles (Weimann, 1994), and who are considered as both a source and guide (McQuail & Windahl, 1993). Nisbet & Kotcher (2009) indicate that the significance of opinion leaders relies neither on formal power nor prestige, but instead on their ability to serve as the connective communication tissue that alerts their peers to what matters among political events, social issues, and consumer choices. Opinion leadership is derived from the two-step flow theory (Katz & Lazarsfeld, 1955), which states that certain people are recognized as opinion leaders who interpret media information that they receive, pass it on to others, and increase its influence accordingly. In Katz (1957, p.73) it was shown that the dimensions of opinion leaders are based on three common characteristics and behaviors: personification of certain values (who one is); competence (what one knows); and strategic social location (whom one knows). The first dimension relates to the traits and values of opinion leaders. Meanwhile, competence expresses opinion leaders' level of expertise on certain subjects, and finally, social location concerns the size of their network and particularly the

number who value their leadership in the particular area of expertise. As reported by Cascio (2003) and Carson (2007), opinion leaders play an important role in improving communication and encouraging group members in order to have a greater level of information exchange. Superior status, education, and social prestige enable them to influence their followers, which are significant elements to create a connected community and best group performance.

The focus of numerous research has been on several characteristics of the opinion leaders. Merwe & Heerden (2009) found that an opinion leader could be identified as the leader or people with influence in a certain community, where an opinion leader is the person with higher structural position in the community. Secondly, opinion leaders have a tendency to have familiar and personal involvement in the product categories (Chan & Misra, 1990), as well as an expertise on the products (Jacoby & Hoyer, 2001). High level of product category involvement and loyalty has been observed to be a strong determinant for opinion leadership. Opinion leaders relationship with innovativeness has been found to be stronger compared to a three-dimensional exploratory behavior construct (i.e. new brand trial, information, and cautiousness). Additionally, opinion leaders were viewed to have a need to become users of new products or brands (Ruvio & Shoham, 2007).

According to the aforementioned two-step flow communication theory, instead of having a general and direct effect, opinion leaders who decode messages and mediate the transmission of information through many group interactions, also filter messages disseminated by mass media (Flynn, Goldsmith & Eastman, 1996). This effect requires reinterpretation of related theories of information flow and influence. In the meantime, brands have noticed the power of opinion leaders to directly influence their connected networks by making suggestions, which result in the search for, purchase of, and use of products. Attributable to the characteristics of social media,

based on consumer-to-consumer dialog, it is difficult for brand managers to shape the conversation directly. Nevertheless, they have the opportunity to influence their target market by utilizing opinion leaders as intermediaries within a brand directed at consumers, given that this intermediary role fits with the two-step flow of communication (Katz & Lazarsfeld, 1955). After observing what companies can obtain from opinion leaders, practitioners seek to benefit from their popularity, perceived credibility (Schmallegger & Carson, 2008) and expertise (Droge, Stanko & Pollitte, 2010; Wagner & Bolloju, 2005).

Related to the product type and choosing the right person to endorse it, several studies found that the greater effectiveness of a particular type of endorsement (celebrity or expert) depends on the type of product being advertised. For more involved, durable, higher priced, or high technology-oriented products, expert endorsements are likely to have stronger effects than celebrity endorsements (Biswas *et. al.*, 2006). This is supported with the fact that with high-priced or more technology-oriented items to be expected to have greater levels of involvement with the product purchase, hence the internalization process will be more effective than mere identification (Kelman, 1961; Petty, Cacioppo, and Schumann, 1983). Beside high and low-priced classification, product type can be classified into either search goods or experience goods. Search goods refer to the products whose quality can be easily estimated based on product-related information even before purchase (Nelson, 1970, 1974), such as calculators (Senecal & Nantel, 2004), computer printers (Weathers, Sharma, & Wood, 2007), and vitamin pills (Suwelack, Hogleve, & Hoyer, 2011). On the other hand, experience goods refer to the products whose quality is difficult to assess before direct experience, such as video games (Mudambi & Schuff, 2010), mattresses (Weathers et al., 2007), and wine (Senecal & Nantel, 2004). Studies have documented differential effects of online reviews for each product type. For example, participants were more likely to select the product recommended by others when choosing an

experience good (wine) than a search good (calculator) (Senecal & Nantel, 2004) and negative e-WOM had a greater effect on the participants' purchase intention of experience (language school program) than search goods (TOEIC book) (Park & Lee, 2009). Similarly, Huang *et al.* (2009) analyzed actual browsing and transaction records of more than 50,000 households in the United States and found that the presence of consumer feedback increased purchase intention, and such effect was greater for experience than search goods.

Henceforth, this research will examine the possibility that the effect of key opinion leader's characteristics on its characteristics might vary depending on the product type (search or experience goods). According to the elaboration likelihood model (ELM), heightened motivation leads people to examine the message more carefully (Petty, Cacioppo, & Schumann, 1983; Petty & Cacioppo, 1984). Therefore, since consumers rely more on others' product reviews for experience than search goods, or rely more on expert's opinion for high-priced than low-priced product, they tend to elaborate more on review messages and key opinion leader's statement when evaluating experience or high-priced goods.

Corresponding the abovementioned theories, the first hypotheses are:

H1: Key opinion leaders' (a) perceived professional knowledge, (b) familiarity, (c) fame, (d) innovativeness, and (e) source of credibility are seen as more effective, as compared to celebrities, for experience good.

Prior researches have correspondingly found comparable characteristics between key opinion leader and celebrity, such as familiarity (Kamins, 1990; Misra and Beatty, 1990), fame (Cooper, 1984; Miciak & Shanklin, 1994), innovativeness (Lafferty *et al.*, 2005) and source of credibility (Dholakia and Stemthal, 1977; Hovland, *et al.* 1953; Hovland and Weiss, 1951;

Ohanian, 1991; Solomon, 1996). The term '*celebrity*' refers to a well-known individual, for example actors, sport persons, entertainers, and others for their achievements in their respective areas (Friedman and Friedman, 1979). McCracken (1989) defines that celebrity endorsement as any individual who enjoys public recognition and uses this recognition by appearing in an advertisement. They have the potential to enhance audience attentiveness, make the advertisement more memorable, credible, and desirable, along with building a glamour impression for the endorsed product (Spielman, 1981). Celebrity endorsement is considered as a valuable asset to obtain consumer awareness, which could lead to purchase intention and profit towards the companies.

In spite of the benefits, there are several things that need to be noticed related to celebrity endorsement use. According to Kelman (1961), when the source model of a communication is a celebrity, the consumer's attitude change occurs through the process of identification. Identification occurs when an individual attempt to establish or maintain the identity associated with a celebrity endorser (Kelman 1961). The identification process brought by celebrity endorsements is more effective when the consumer is only peripherally processing the information presented for a product. In such a scenario, the various cues associated with the object or context (such as the celebrity endorser) exerts maximum influence (Sengupta, Goodstein, and Boninger 1997). However, this would not be the case for high technology-oriented or experience products. There is indirect support for this argument in the work of Petty, Cacioppo, and Schumann (1983), in which they found that when an advertisement concerned a product of low involvement, the celebrity status of the endorser had a strong influence on consumer perceptions and attitudes. For low-technology products, the peripheral cue (i.e., the celebrity endorser) would have some effect, and would therefore attenuate the stronger effects of expert endorsers.

Therefore, after observing the arguments above, the second hypotheses are:

H2: Celebrities' (a) perceived professional knowledge, (b) familiarity, (c) fame, (d) innovativeness, and (e) source of credibility are seen as more effective, as compared to key opinion leader, for search good.

Purchase Intention

Ostrom (1969) and Bagozzi *et al.* (1979) indicate that purchase intentions are personal action tendencies relating to the brand, in which intentions are distinct from attitudes. Whereas attitudes are summary of evaluations, intentions represent the person's motivation in the sense of his or her conscious plan to exert effort to carry out a behavior (Eagly & Chaiken, 1993). Thus, a concise definition of purchase intentions may be as follows: purchase intentions are an individual's conscious plan to make an effort to purchase a brand (Spears & Singh, 2004).

One of the first examples of how online word of mouth (e-WOM) affects purchase intention is presented in Bao & Chang (2014), in which opinion leaders drive product sales as a result of their product experience and product knowledge. Further findings are described in Chen & Xie (2008) and Sun (2012), where consumers habitually communicate their brand satisfaction level by owning online user ratings. In this works and related references, it was observed that positive ratings could improve consumers' attitude, while negative public ratings can worsen it (Liu, 2006). A study by Meng (2016) found that opinion leader's professional knowledge, product involvement, interactive, functional value, emotional value influence purchase intention virtually via trust. Simultaneously, opinion leader's professionalism, product involvement and visual clue impact purchase intension directly. The results of the study by Gupta & Kishore (2015) revealed that attractiveness and trustworthiness of a celebrity endorser have a significant

impact on consumers' purchase intention in the case of Indian consumers. In this research, the effect of attractiveness and trustworthiness on purchase intention will be tested.

There are several studies that compared the effectiveness of celebrity endorsement and opinion leader towards consumer's attitude and purchase intention, for instance Wei & Lu (2013). The study found that a product (especially search good) endorsed by a celebrity in an advertisement evoked significantly more attention, desire, and action from the consumer than did an online customer review (opinion leader). However online customer reviews emerged higher than the celebrity endorsement on the scale of participants' memory, search and share attitudes toward the another kind of product (experience good). A study by Kwon & Song (2015) found that opinion leaders actually played a major role in influencing the decisions of passive audiences. Based on 20 dissertations about market mavens (a broader type of opinion leader), consumer are often likely to consider the opinion of market mavens before making any purchase decisions. The previous studies above also align with study conducted by Djafarova & Rushworth (2017), which found that celebrities on Instagram are influential in the purchase behaviour of young female users. This study argues that non-traditional celebrities such as bloggers, YouTube personalities and 'Instafamous' profiles are more powerful, as participants regard them as more credible and are able to relate to these, rather than more traditional, celebrities. These findings could be the reason of why do companies see for ways to utilize influencers to generate interest, drive action, create goodwill, establish expertise, and create dialog with their online stakeholders (Gardner, 2005), rather than focusing solely on traditional media. Nowadays companies think that publicity by potential influencers in online landscape combined with a strategic, effective, and sustainable management of key opinion leaders are essential in building brand's success story.

There are several research gaps from previous studies that needed to be explored further. There are research needs to explore Instagram in relation to brand recall, visual communication, use of figurative language within the images portrayed and viewer participation and also conducting an analysis of the factors which influence different social media usage across genders, in particular, investigation into source credibility and self-esteem of consumers. It is also essential to consider moderating influences of age and gender and also the impact of celebrity endorsement on products with varying product involvement levels. Another study proposes future research to examine multiple celebrities and non-celebrities in advertisements and online customer reviews. They also suggest to study different age groups, gender effect, other nationality and other product classes. Another study proposes future study to conduct another meta-analysis study with more samples, also adding the role of gender on the final results and focus on a specific industry or product line.

Therefore, from the theories and research gaps described above, the third and fourth hypothesis will be:

H3: (a) Professional knowledge, (b) familiarity, (c) fame, (d) innovativeness, (e) source of credibility will affect purchase intention more positively for key opinion compare to celebrity.

H4: Key opinion leader will lead to a higher purchase intention compare to celebrity.

The Influence of Gender

Social role theory of gender (Eagly 1987) states that societally defined gender roles and associated normative expectation towards males and females cause gender differences regarding behavior and preferences (Athensteadt et al. 2009, p. 399). These differences can be observed from some aspects, for example product choice (Worth et al. 1992). Scholars also posit that

individuals' information processing patterns may differ across genders (e.g., Putrevu, 2001) and for a long time, gender has been assumed to moderate the effects of communication tools, including advertising (Holbrook, 1986). The selectivity hypothesis is an important perspective that explains why females and males respond differently when they process information (Richard, Chebat, Yang, & Putrevu, 2010). This perspective refers to females as comprehensive processors and males as selective processors (Meyers-Levy & Stemthal, 1991). Comprehensive processors suggest that females are inclined to treat all pieces of information equally and integrate the information comprehensively. On the other hand, selective processors convey the tendency of males to process information selectively. Males prefer to process the information that they are most interested in and believe to be important. The selectivity hypothesis postulates that females may have a lower information elaboration threshold than males (Meyers-Levy & Stemthal, 1991; Richard et al., 2010). Scholars have been applying the selectivity hypothesis to explain why females may be easier to perform systematic processing than males under similar information processing circumstances (e.g., Kempf, Laczniak, & Smith, 2006; Kim, Lehto, & Morrison, 2007; Noseworthy, Cotte, & Lee, 2011).

According to the selectivity hypothesis (Meyers-Levy & Stemthal, 1991; Richard et al., 2010), it could be argued that female consumers may have a higher tendency to perform systematic processing than male consumers. In the context of this study, female consumers may be more likely to have more affected by the information they received from key opinion leader. From this perspective, we expect that female consumers are easier to engage in any message distributed from key opinion leader, making their newly formed emotional trust (i.e., trusting attitude) more accessible and consistent. Thus, the relationship between key opinion leader and

purchase intention may be stronger for females than males. Following these theories and findings, the last hypothesis is:

H5: The relationship between key opinion leader and purchase intention will be stronger for female consumer than male consumer.

To summarize the hypotheses altogether, below is the detailed figure of the model.

-- Figure 1 about here --

Methodology

Method

The current study objective is to examine the effects of key opinion leaders on the consumers' purchase intentions for search and experience goods by using gender as moderator. To answer this objective, 5 hypotheses are proposed, and an experimental survey method will be applied to test these hypotheses. Bhattacharjee (2012) defined experimental technique as “the design where one or more independent variables are manipulated by the researcher (as treatments), subjects are randomly assigned to different treatment levels (random assignments) and results of the treatments on outcomes (dependent variables) are observed” (2012, p. 83). The goal of the experimental research is to examine cause-effect relationships, which is the unique strength of the method. Experimental design helps to ensure internal validity, but sometimes at the expense of external validity making the results not applicable to a larger population. The experiment implies random assignments of respondents to control and treatment conditions, comparing the judgments and answers of the respondents in the treatment group to those in the

control groups reveals the causal effects under the investigation (Gaines et al., 2007). This section will explain the research design, population and sample, measures and data collection.

Research design

Based on the formulated research questions and hypotheses, research design was conducted between the groups. It consists of three experimental groups; control group, first treatment group with key opinion leaders, and second treatment group with celebrities. The control group, received two advertisements (Adidas shoes for search good and Samsung phone & Lancôme cosmetic for experience good) without any profile endorsement. The first treatment group also received two advertisements from search and experience goods with key opinion leaders endorsing the products (Kayla Itsiness and Mat Fraser endorsing Adidas shoes, Michelle Phan endorsing Lancôme, and Marques Brownlee endorsing Samsung). The second treatment group received the same amount and type of advertisements but with a celebrity as the endorsement (Rita Ora and Kanye West endorsing Adidas shoes, Emma Watson endorsing Lancôme, and Justin Bieber endorsing Samsung). All eight figures (Kayla Itsiness, Kanye West, Mat Fraser, Michelle Phan, Rita Ora, Emma Watson, Justin Bieber, and Marques Brownlee) were selected based on their professional knowledge, familiarity, fame (regarding the total followers they have), innovativeness and source of credibility. Each figure has their own specialties which are related to the product advertised such as Kayla Itsiness, as the most followed fitness personal trainer on Instagram (9.9 Millions followers), was representing Adidas advertisement and Marques Brown, as the most followed gadget and electronic device reviewer on Youtube (6.4 Millions subscribers), was representing Samsung advertisement.

-- Table 1 about here --

Procedures

Prior to the main experiment, a pre-survey was conducted to explore the most influential key opinion leaders for the population so that the stimuli used in the main experiment will be valid and relate to the respondents. A sampling procedure, a probability sampling in which each element has a known probability of being included in the sample, (Kothari, 2004) was used. Recruitment of the participants was done through the snowball sampling and followers database of the key opinion leaders and the celebrities.

First, the online questionnaire was disseminated through SocSci website. As described previously, there are three experimental groups (control, KOL and celebrity group). The control group received two stimuli for search and experience goods without any endorsement. The KOL group received stimulus with key opinion leaders as the endorser for search and experience goods and so did the celebrity group with celebrities as the endorser. The questionnaire consists of three parts. In the first part, respondents were asked for demographic information such as gender, age, educational background, income, and nationality. Then social media usage was also asked to find out respondents behavior about the type of social media they use, how often and the purpose of using it. The last part is the stimuli part, where the hypotheses are tested. Each respondent got two stimuli from search and experience goods. The gender of the endorsement varies based on the gender of the respondents. There is no time limit to complete the questionnaire. The average time for the respondent to complete the questionnaire is around 5 – 10 minutes. The collected data from SocSci Survey website was imported and analyzed with IBM SPSS Statistic Version 24.

Data Collection and Participants

There were 419 total respondents collected for this study and 400 cases were used for the final analysis. Respondents were collected by using snowball sampling from social media behavior and their celebrity preferences as the selection criteria. The data collection was focused on respondents aged from 18 – 29 years old because it was concluded that those in the selected age groups were the most common users of social media (Smith & Anderson, 2018). The sample was drawn from a mixture of high school and university students, and young professionals. The educational backgrounds vary from high school graduates (27.3%), diploma and bachelor's degree graduates (55.3%), master's degree graduates (16.3%), and Ph.D graduates (0.8%). Almost all respondents use more than one kind of social media (84.5%) with an average of three social medias being used by each respondent. Facebook and Instagram are used by most of the respondents (Facebook 82% and Instagram 86%), while only half of the respondents have a Youtube account (56%), 36.3% of the respondents have Twitter, and 19.3% have some other kind of social media such as LinkedIn, Snapchat, Line, Pinterest and many others. The social media usage frequency of the respondents is considered to be high. 74.9% of the respondents use social media almost everyday and 54.5% of the respondents visit their favorite social media site around 2 – 5 times/ day. The purpose of using social media is mainly to upload music/ pictures/ videos (22%) and to keep in contact and share experiences with friends (17.7%).

Measures

Based on the research question, hypotheses and model that were formulated, there are several key variables that needed to be measured.

Independent Variable

Since the purpose of this study is to identify the differences between key opinion leaders and celebrities, the independent variable consisted of the experimental groups (control, KOL and celebrity group).

Dependent Variable

Professional Knowledge

To evaluate professional knowledge, six indicators (Netemeyer and Bearden, 1992) are used. For these indicators, respondents had to put a score from 1 (strongly disagree) until 5 (strongly agree). The indicators are knowledgeable, competent, expert, trained, experienced, informed. The indicators are found to be reliable ($\alpha = 0.88$).

Familiarity

The familiarity level of the respondents towards the KOL or celebrity is measured by four indicators (Chan and Misra, 1990; Miciak & Shanklin, 1994). These indicators are also measured with scores from 1 (strongly disagree) until 5 (strongly disagree). The three indicators are “I recognize the celebrity/ KOL”, “I like the celebrity/ KOL”, “the celebrity/ KOL seems friendly to me”, and “the figure seems familiar to me”. The reliability index for these indicators is considered high ($\alpha = 0.86$).

Fame

To measure the fame level of the KOL or celebrity, seven indicators are used (Li, 2007; Bansal, 2000, Maltby et al.'s, 2008). The indicators are measured by 5-point semantic scale, from 1 (strongly disagree) until 5 (strongly agree). The seven indicators are “ambitious”, “always seek

to compare to others”, “attention seeking”, “conceitedness”, “social access”, “psychological vulnerability”, “glamour”. The reliability scale for this variable is high ($\alpha = 0.815$).

Innovativeness

Innovativeness of the KOL or celebrity is measured by four indicators Rogers & Shoemaker, 1995. Semantic scale from 1 (strongly disagree) until 5 (strongly agree) is also used to measure this variable. The indicators are “I often seek this person’s opinion about some issues that is currently happening”, “this person often try new ideas”, “his/ her way of thinking is creative and original”, and “he/ she is the leading figure for the field”. The reliability scale for this variable is also considered high ($\alpha = 0.815$).

Credibility source theory

As described by Hovland et al., 1953; Ohanian, 1991; Erdogan, 1999, credibility source are consisted of three aspects: expertiseness, trustworthiness, attractiveness. Based on previous researches which used credibility source theory, this variable can be measured by semantic scale with 12 different scales: “honest/dishonest”, “reliable/unreliable”, “sincere/insincere”, “trustworthy/untrustworthy”, “attractive/unattractive”, “classy/not classy”, “beautiful/ugly”, “elegant/plain”, “expert/not an expert”, “experienced/inexperienced”, “knowledgeable/unknowledgeable”, “qualified/unqualified”. The indicators are found to be reliable ($\alpha = 0.94$).

Purchase Intention

To measure this variable, respondent had to describe their feeling by filling out four statements (Abelson et al. 1982; Edell and Burke 1987, p. 423). Semantic scale is used to measure the statements: “1 = Definitely do not intend to buy it – 5 = definitely intend to buy it”, “1 = Very low purchase interest – 5 = high purchase interest”, “1 = Definitely not buy it – 5 = definitely buy it”, “1 = Probably not buy it – 5 = probably buy it”. The indicators show a high reliability scale ($\alpha = 0.88$). The mean and standard deviation comparison of each variable from three experimental groups are summarized below.

-- Table 2 about here --

The central tendencies number (coding was 1 for strongly disagree and 5 for strongly agree) show that the advertisements endorsed by KOL have a higher rating score compare to the advertisements with celebrity endorsement and without endorsement. KOL also has better evaluation in terms of professional knowledge, credibility source theory and purchase intention, while celebrity outperforms KOL in terms of familiarity, fame, and innovativeness. To identify whether the higher rating in KOL or celebrity group was caused by the different advertisement in every group, more elaborate analysis such as regression and PROCESS macro (Hayes, 2013) in SPSS Statistics 24 are discussed in the results part.

Manipulation Checks

To ensure that the stimulus (advertisement with and without endorser) assigned in each group effectively presents different impacts, a manipulation check test needs to be conducted. For this study, an ANOVA test on the dependent variables was performed to see the mean differences from each group. Based on the ANOVA results on the dependent variable “professional knowledge”, it was shown that the manipulation check was statistically significant ($F[1,264] =$

.733, $p < .000$). The mean value from the KOL group is 3.50 and the celebrity group is 3.42. This means the manipulation was successful. The respondents who were in the KOL group considered the KOL figures, who endorsed the product in the advertisements, as experts, competent, and have the required knowledge that they need in their field.

Results

Analysis Procedures

Before analyzing the main hypotheses, a Pearson correlation test was conducted to identify the correlation between the independent variables (the experimental groups, KOL and celebrity groups) and the dependent variables (professional knowledge, familiarity, fame, innovativeness, source of credibility theory and purchase intention). A correlation test is also required to identify multicollinearity within dependent variables, which are required in every mediation analysis (Baron & Kenny, 1986).

-- Table 3 about here --

Based on table 3, independent variable (experimental group) is highly correlated with some of the dependent variables (familiarity and source of credibility, $p < 0.05$). The correlation between each dependent variables are proven to be significantly correlated ($p < 0.05$) which means multicollinearity presents and fulfill the requirements of mediation analysis.

Key Opinion Leader Endorsement and Experience Good

H1a: Key opinion leaders' perceived professional knowledge is seen as more effective, as compared to celebrities, for experience good. The results from PROCESS show that the stimulus

did not have a significant effect on key opinion leaders' professional knowledge. $F[1, 264] = 1.9824$, $p > 0.05$ (.1603), $R^2 = .083$. Experimental group KOL did not give a statistically significant prediction ($\beta = -.1898$, $p > .05$ (.1603)). Therefore, it is not proven that key opinion leaders' perceived professional knowledge is more effective than celebrities, for experience good. This means hypothesis 1a is rejected.

H1b: Key opinion leaders' familiarity is seen as more effective, as compared to celebrities, for experience good. The results from PROCESS show that the stimulus did not have a significant effect on key opinion leaders' familiarity, $F[1, 264] = .0087$, $p > 0.05$ (.9259), $R^2 = .0000$. Experimental group KOL do not give statistically significant prediction ($\beta = -.0151$, $p > .05$ (.9259)). Therefore, hypothesis 1b is rejected.

H1c: Key opinion leaders' fame is seen as more effective, as compared to celebrities, for experience good. The results show that the stimulus did not have significant effect on fame, $F[1, 264] = .0014$, $p > 0.05$ (.9703), $R^2 = .0023$. Experimental group KOL did not give statistically significant prediction ($\beta = -.0037$, $p > .05$ (.9703)). Therefore, hypothesis 1c is rejected.

H1d: Key opinion leaders' innovativeness is seen as more effective, as compared to celebrities, for experience good. The results show that the stimulus did not have significant effect towards innovativeness, $F[1, 264] = 2.2176$, $p > .05$ (.1376), $R^2 = .0913$. Experimental group KOL did not give statistically significant prediction ($\beta = -.1991$, $p > .05$ (.1376)). Therefore, hypothesis 1d is rejected.

H1e: Key opinion leaders' source of credibility is seen as more effective, as compared to celebrities, for experience good. The results show that key opinion leader did not have significant

effect on source of credibility, $F[1, 264] = .8244$, $p > 0.05$ (.3647), $R^2 = .0558$. Experimental group KOL did not give statistically significant prediction ($\beta = -.1069$, $p > .05$ (.3647)). Therefore, hypothesis 1e is rejected.

Celebrities Endorsement and Search Good

H2a: Celebrities will have higher effectiveness on perceived professional knowledge compare to key opinion leader for search good. The results show that celebrities did not have significant effect towards professional knowledge, $F[1, 264] = 1.4002$, $p > .05$ (.2378), $R^2 = .0726$. Experimental group celebrity do not give statistically significant prediction ($\beta = -.1282$, $p > .05$ (.2378)). Therefore, hypothesis 2a is rejected.

H2b: Celebrities will have higher effectiveness on familiarity compare to key opinion leader for search good. The results show that celebrity do not have significant effect towards familiarity, $F[1, 264] = .0634$, $p > .05$ (.8014), $R^2 = .0155$. Experimental group celebrity do not give statistically significant prediction ($\beta = .0347$, $p > .05$ (.8014)). Therefore, hypothesis 2b is rejected.

H2c: Celebrities will have higher effectiveness on fame compare to key opinion leader for search good. The results show that celebrity have significant effect towards fame, $F[1, 264] = 3.9954$, $p < .05$ (.0466), $R^2 = .0149$. Experimental group celebrity give statistically significant prediction ($\beta = -.1841$, $p > .05$ (.0466)). Therefore, hypothesis 2c is supported.

H2d: Celebrities will have higher effectiveness on innovativeness compare to key opinion leader for search good. The results show that celebrity do not have significant effect towards innovation, $F[1, 264] = .0039$, $p > .05$ (.9502), $R^2 = .0000$. Experimental group celebrity do not

give statistically significant prediction ($\beta = -.0069$, $p > .05$ (.9502)). Therefore, hypothesis 2d is rejected.

H2e: Celebrities will have higher effectiveness on source of credibility compare to key opinion leader for search good. The results show that celebrity do not have significant effect towards source of credibility, $F[1, 264] = .4728$, $p > .05$ (.4923), $R^2 = .0000$. Experimental group celebrity do not give statistically significant prediction ($\beta = .0619$, $p > .05$ (.4923)). Therefore, hypothesis 2e is rejected.

Mediation Analysis

H3a: Professional knowledge will affect purchase intention more positively for key opinion leaders as compared to celebrities. The results show that professional knowledge of KOLs has significant direct effect on purchase intention, $F[2, 263] = 38.7698$, $p < .05$ (.000), $R^2 = .2277$, $\beta = .6232$, $p < .05$ (.000). This makes hypothesis 3a is supported.

H3b: Familiarity will affect purchase intention more positively for key opinion leaders as compared to celebrities. The results show that the familiarity of KOLs have significant direct effect on purchase intention, $F[2, 263] = 14.7228$, $p < .05$ (.000), $R^2 = .1007$, $\beta = .2990$, $p < .05$ (.000). Therefore, hypothesis 3b is supported.

H3c: Fame will affect purchase intention more positively for key opinion compare to celebrity. The results show that the fame of KOL have significant direct effect on purchase intention, $F[2, 263] = 10.4547$, $p < .05$ (.000), $R^2 = .0736$, $\beta = .3994$, $p < .05$ (.000). This makes hypothesis 3c is supported.

H3d: Innovativeness will affect purchase intention more positively for key opinion compare to celebrity. The results show that the innovativeness of KOL has significant direct

effect on purchase intention, $F[2, 263] = 61.7368$, $p < .05$ (.000), $R^2 = .3195$, $\beta = .6602$, $p < .05$ (.000). Therefore, hypothesis 3d is supported.

H3e: Source of credibility will affect purchase intention more positively for key opinion compare to celebrity. The results show that source of credibility from the KOL has significant direct effect on purchase intention, $F[2, 263] = 30.0385$, $p < .05$ (.000), $R^2 = .1860$, $\beta = 1.1761$, $p < .05$ (.000). In other words, hypothesis 3e is supported.

The mediation analyses were conducted using SPSS macro Indirect (Preacher and Hayes 2008). Table 4 reports the regression coefficients for the paths through the mediator, as well as for the direct effect of the independent variable on the dependent variable and the mean indirect effect. The confidence interval for the indirect effect is the equivalent of the Sobel test; if the confidence interval does not include zero, the total mediated effect of the independent variable on the dependent variable is statistically significant at the chosen level (in the current analyses, the chosen level is 95%). The results of the mediation analyses with purchase intention as the dependent variable (Table 4) lend support to H3a-e; professional knowledge, familiarity, fame, innovativeness and source of credibility partially mediated the effects of key opinion leader on purchase intention.

-- Table 4 about here --

Key Opinion Leader Compared to Celebrity Endorsement

H4: Key opinion leader will lead to a higher purchase intention compare to celebrity. To test hypothesis 4, a linear regression with dummy variables was conducted. The results show a significant value, $F(6, 393)$, $p < 0.000$, $R^2 = 0.269$. Both KOLs and celebrity groups give statistically significant prediction in the model, $\beta = -.263$, $p < 0.05$ (0.016) for the KOL group and $\beta = -.249$, $p < 0.05$ (0.022) for the celebrity group. This means both KOLs and celebrity

groups have statistically significant effects on purchase intention. However, looking at the coefficient value, it can be concluded that the celebrity group is slightly less negative than the KOL group on the purchase intention. This indicates that celebrity leads to a better purchase intention as compared to key opinion leaders. Following this result, then Hypothesis 4 is rejected

H5: The relationship between key opinion leaders and purchase intention will be stronger for female consumers than male consumers. To analyze this hypothesis, an ANOVA test was conducted and the results show that there is no significant prediction in terms of comparison between female and male respondents, $F[1, 135] = .057, p > .05 (.812)$, mean value of purchase intention from female respondents is 2.98 and male respondents is 2.94. This indicates that there is no substantial difference between female and male respondents on purchase intention.

-- Table 5 about here --

Discussion

The development of social media supports the rise of key opinion leaders, which can be considered as the new age 'celebrity endorser'. Even though they are not widely covered by traditional media channels such as television, radio or print media, consumers start to consider their opinions or reviews regarding particular products or brands that they want to purchase. This study examines the effectiveness of key opinion leaders as compared to celebrities, specifically for search and experience goods. The definition of an opinion leader is widely accepted to be one who is highly respected and whose opinion is utilized by the consumers to help in making a decision across a variety of situations (Cosmas & Sheth, 1980). The research provides support that key opinion leaders do indeed create different impacts on consumers and their decisions to purchase a product.

In the first part of the results, the experiment indicated that key opinion leaders do not significantly have higher effectiveness on professional knowledge, familiarity, fame, innovativeness and source of credibility on experience goods as compared to celebrities. The reason for this finding most likely is the respondents could not relate to the selected key opinion leader. This can be seen from 'familiarity' variables, which only has an average value of 2.9 (from 1 – 5 scale). This means the respondents know the figures but they do not have a strong attachment towards the key opinion leader, which means they do not have sufficient information about the KOL's professional knowledge or credibility. This assumption is supported by a study from Ilicic & Webster (2011), which found out that celebrities to whom consumers are attached may be more effective endorsers of brands than those celebrities to whom consumers are less attached.

The findings for celebrities are nearly the same. Most characteristics are not significant with a difference in 'fame' aspect. This finding aligns with prior studies by Surana (2008) and Till (1998). This current study used several celebrities who are already well known worldwide such as Kanye West, Rita Ora, Emma Watson, and Justin Bieber. Compared to the key opinion leaders that were used, these figures have more followers in their social media account and more appearances in other media such as television, magazines, etc. This explains why celebrities performed higher for 'fame' variable than key opinion leaders in this study.

In the second part of the results, all key opinion leaders' characteristics (professional knowledge, familiarity, fame, innovativeness and source of credibility) have significant impact on purchase intention. This finding indicates that all key opinion leaders' characteristics partially mediated the effect of key opinion leaders on purchase intention. This means the more professional knowledge, familiarity, fame, innovativeness and credibility a key opinion leader

has, the higher their effect on consumers' purchase intention. The finding confirms the previous studies from Bao & Chang (2014), which stated that opinion leaders drive product sales as a result of their product experience and product knowledge and also a study by Gupta & Kishore (2015), which stated that attractiveness and trustworthiness of celebrity endorsers have a significant impact on consumers' purchase intention.

Nevertheless, in this study female respondents show that they do not have particular tendencies towards purchase intention as compared to male respondents, which does not confirm the last hypothesis. This finding is not consistent with previous studies that indicated female consumers may have a higher tendency to perform systematic processing than male consumers (Kempf, Laczniak, & Smith, 2006; Kim, Lehto, & Morrison, 2007; Noseworthy, Cotte, & Lee, Meyers-Levy & Stemthal, 1991; Richard et al., 2010). However, this might be a result of the themes of the advertisements being too similar in this study for both men and women. The advertisements used the same template and mood board, and differ only by the figures (key opinion leader or celebrities). Based on study by Millward Brown (2011), men and women have different ad preferences. Men are more likely to enjoy ads featuring humor, distinctive creative styles, and sexual imagery, while women are more likely to enjoy ads featuring children or a slice of life. These preference differences could be what caused men and women in this study to respond in an indifferent way.

Therefore, after reviewing the entire study, there is one main implication that can be used by organizations in order to be put into operation. Companies have to consider using key opinion leaders as an alternative to celebrities because they have the characteristics to intensify purchase intention (professional knowledge, familiarity, fame, innovativeness, and source of credibility). However, companies need to be careful when choosing the right key opinion leader. Based on

the findings related to key opinion leaders' characteristic, it is crucial to choose key opinion leaders that the consumers are attached to.

Limitations

There are several limitations from this study that should be taken into consideration despite some useful insights and managerial implications. First of all, the number of respondents who participated in this study was relatively small (400 respondents), considering the amount of the experiment groups (three groups). This can be one reason of some insignificant results. Thus, future research in this similar field needs to increase the amount of respondents. Secondly, online surveys were used to collect information, which has the tendency to have self-selection bias. It is proposed that the future research use an interview-assisted quantitative viewpoint to support such research. Thirdly, this study used a convenience sample and without any barriers for the respondents in regards to their key opinion leader or celebrity preferences. After seeing the results of this study, it is essential to choose the right respondents who are closely attached to the figures. It is also important to choose the right advertising theme related to gender. Since men and women have different preferences, the future research should modify the advertisement in terms of layout and themes so each gender can relate to the advertisements. Fourthly, the proposed model examined the effect of key opinion leaders and their characteristics on purchase intention. However, it is interesting to combine cognitive and affective factors of advertising effectiveness, such as emotional responses and beliefs, in order to mediate the effects of key opinion leaders' characteristics on purchase intention. Future research can extend the proposed model by incorporating these factors and thereby providing a deeper and more comprehensive

insight into the effectiveness of key opinion leader. Finally, this study examined the moderating role of gender in social media. Future research should consider other characteristics (e.g. age, education level, and social media experience), which may influence the relationship between online stimuli and consumer responses.

References

- Ault, S. (2015). Digital Star Popularity Grows Versus Mainstream Celebrities. Retrieved from <https://variety.com/2015/digital/news/youtubers-teen-survey-ksi-pewdiepie-1201544882/>
- Abelson, R. P., Kinder, D., Peters, M. D. and Fiske, S. T. (1982). Affective and Semantic Components in Political Person Perception. *Journal of Personality and Social Psychology*, 42 (April), 619-30.
- Bagozzi, R. P. (1981). Attitudes, Intentions, and Behavior: A Test of Some Key Hypotheses. *Journal of Personality and Social Psychology*, 41,607-27.
- Bansal H.S., Voyer P.A. (2000). Word-of-mouth processes within a services purchase decision context. *Journal of Service Research*, vol. 3, no. 2, pp. 166-177.
- Bao, T. & Chang, T.S. (2014). Finding disseminators via electronic word of mouth message for effective marketing communications. *Decision Support Systems* 67: 21–29.
- 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), 1173-1182.
- Bearden, W. O., Netemeyer, R. G. & Teel, J. E. (1989), Measurement of Consumer Susceptibility to Interpersonal Influence. *Journal of Consumer Research*, 15 (March), 473-481.
- Bhattacharjee, A. (2012). Social Science Research: Principles, Methods, and Practices. *Textbooks Collection*. 3. http://scholarcommons.usf.edu/oa_textbooks/3
- Biswas, D., Biswas, A., & Das, N. (2006). The differential effects of celebrity and expert endorsements on consumer risk perceptions: The role of consumer knowledge, perceived congruency, and product technology orientation. *Journal of Advertising*, 35(2), 17-31.

- Chan, K. & Misra, S. (1990). Characteristics of the Opinion Leader: A New Dimension. *Journal of Advertising*. 19. 53-60. 10.1080/00913367.1990.10673192.
- Chen, Y. & J. Xie. (2008). Online consumer review: word-of-mouth as a new element of marketing communication mix, *Management Science* 54 (3): 477–491.
- Cooper, M. (1984). Can celebrities really sell products? *Marketing and Media Decisions*, September, p64-65 and 120.
- Cosmas, S. C. & Sheth, J. (1980). Identification of Opinion Leaders across Cultures: An Assessment for Use in the Diffusion of Innovations and Ideas. *Journal of International Business Studies*. 11. 66-72. 10.1057/palgrave.jibs.8490597.
- Dholakia, Ruby & Stemthai, B. (1977). Highly Credible Sources: Persuasive Facilitators or Persuasive Liabilities? *The Journal of Consumer Research*. 3, 223-32.
- Djafarova, E. & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in Human Behavior* 68: 1 – 7.
- Droge, C., Stanko, M. A., & Pollitte, W. A. (2010). Lead users and early adopters on the web: The role of new technology product blogs. *Journal of Product Innovation Management*, 27(1), 66-82. DOI: 10.1111/j.1540-5885.2009.00700.x
- BusinessNewsDaily Staff (2011). Need a Product Endorsement? Look to Bloggers, Not Celebrities. Retrieved 13/11/2017 from <http://www.businessnewsdaily.com/882-bloggers-celebrities-influence.html>.
- Carson, J. B. et al., (2007). Shared leadership in teams: an investigation of antecedent conditions and performance, *Acad. Manag. J.* 50 (5).
- Cascio, F. Wayne, Shurygailo Stan, (2003). E-leadership and virtual teams, *Organ. Dyn* 31

(4).

Eagly, A. H. & Chaiken, S. (1993), *The Psychology of Attitudes*. New York: Harcourt Brace College Publishers.

Burke, M. C. & Edell, J. A. (1989), The Impact of Feelings on Ad-Based Affect and Cognition. *Journal of Marketing Research*, 26 (February), 69-83.

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

Friedman, H. H. & Friedman, L. (1979). Endorser effectiveness by product type. *Journal of Advertising Res.* 19(5):63-71.

Smith, A. & Monica Anderson (2018). Social Media Use in 2018. Retrieved 27/07/2018 from: <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/>.

Flynn, L. R., Goldsmith, R. E., & Eastman, J. K. (1996). Opinion leaders and opinion seekers: Two new measurement scales. *Journal of the Academy of Marketing Science*, 24(2), 137–147.

Giles, D.C. & Maltby, J. (2004). The role of media in adolescent development: relations between autonomy, attachment and interest in celebrities. *Personality and Individual Differences*, Vol. 36 No. 4, pp. 813-822.

Goldsmith, R., Lafferty, B., & Newell, S. (2000). The impact of corporate credibility and celebrity credibility on consumer reaction to advertisements and brands. *Journal of Advertising*, 29(3), 43-54.

Gupta, R., et. al., (2015). Impact of Celebrity Endorsement on Consumers' Purchase Intention: A Study of Indian Consumers. *Australian Journal of Business and Management*

Research, Vol.05 No.03.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.

Huang, P., Lurie, N., & Mitra, S. (2009). Searching for Experience on the Web: An Empirical Examination of Consumer Behavior for Search and Experience Goods. *Journal of Marketing, 73*(2), 55-69. Retrieved from <http://www.jstor.org/stable/20619010>.

Hovland, C. & Weiss, W. (1951). The Influence of Source Credibility on Communication Effectiveness. *Public Opinion Quarterly, 15*, Winter, pp.635-650.

Hovland, C., Janis, L., & Kelley, H. (1953). *Communication and persuasion*. New Haven, CT: Yale University Press.

Jacoby, J. and Hoyer, W. D. (2001). What Opinion Leaders didn't know more? A Question of nomological validity. *Advances in consumer research (2001)*, 299-303

Jiménez, F. R., & Mendoza N. A. (2013). Too Popular to Ignore: The Influence of Online Reviews on Purchase Intentions of Search and Experience Products. *Journal of Interactive Marketing 27*, 226–235.

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.

Katz, E., & Lazarsfeld, P. F. (1955). Personal influence: The part played by people in the flow of mass communication. Glencoe, IL: Free Press.

Kelman, H. C. (1961). Processes of opinion change. *Public Opinion Quarterly. 1961; 25*: 57-78.

Kempf, D. S., Laczniak, R. N., & Smith, R. E. (2006). The effects of gender on processing advertising and product trial information. *Marketing Letters, 17*, 5–16.

Kim, D. Y., Lehto, X. Y., & Morrison, A. M. (2007). Gender differences in online travel information search: Implications for marketing communications on the internet. *Tourism Management*, 28, 423–433.

King, C. W., & Summers, J.O.. (1970). Overlap of opinion leadership across consumer product categories. *Journal of Marketing Research* 7 (1) (1970), 43–50.

Lee, E. J. & Shin, S. Y. (2014). When do consumers buy online product reviews? Effects of review quality, product type, and reviewer's photo. *Computers in Human Behavior: Volume 31*, 356-366.

Liu, Y. (2006). Word of mouth for movies: its dynamics and impact on box office revenue. *Journal of Marketing* 70 (3): 74–89.

Meng, F. & Wei, J. (2016). What Factors of Online Opinion Leader Influence Consumer Purchase Intention? *International Journal of Simulation -- Systems, Science & Technology* . 2015, Vol. 16 Issue 3B: p15.1-15.8. 8p.

Meyers-Levy, J., & Stemthal, B. (1991). Gender differences in the use of message cues and judgments. *Journal of Marketing Research*, 28, 84–96.

Miciak, A.R., Shanklin, W.L., 1994. Choosing celebrity endorsers. *Marketing Management*. 3 (3), 50–60.

Millward Brown. (2011). Do men and women respond differently to ads? Retrieved from <http://www.armi-marketing.com/library/MenWomenRespondDifferentlyAds.pdf>.

Misra, S., & Sharon E. B. (1990). Celebrity Spokesperson and Brand Congruence: An Assessment of Recall and Affect. *Journal of Business Research*, 21 (2), 159–173.

McCormick, K. (2016). Celebrity endorsements: Influence of a product-endorser match on Millennials Attitudes and Purchase Intentions. *Journal of Retailing and Consumer Services* 32:

39–45.

McCracken, G. (1989) Who Is the Celebrity Endorser? Cultural Foundations of the Endorsement Process. *Journal of Consumer Research* 16(3): 310-21.

McQuail, D., & Windahl, S. (1993). Communication models for the study of mass communications (2nd ed.). London: Longman.

Nelson, P. (1970). Information and Consumer Behavior. *Journal of Political Economy* 78: 311, 312.

Nisbet, M. C., & Kotcher, J. E. (2009). A two-step flow of influence: Opinion-leader campaigns on climate change. *Science Communication*, 30 (3), 328–354.

Noseworthy, T. J., Cotte, J., & Lee, S. H. M. (2011). The effects of ad context and gender on the identification of visually incongruent products. *Journal of Consumer Research*, 38, 358–375.

Ohanian, R. (1991). The impact of celebrity spokespersons' perceived image on consumers' intention to purchase. *Journal of Advertising Research*, 31(1), 46-54.

Ostrom, T. M. (1969). The Relationship Between the Affective, Behavioral, and Cognitive Components of Attitude. *Journal of Experimental social psychology*, 5, 12-30.

Park, C., & Lee, T. (2009), Information direction, website reputation and eWOM effect: A moderating role of product type. *Journal of Business Research*, 62(1): 61 - 67.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891.

Richard, M.-O., Chebat, J.-C., Yang, Z., & Putrevu, S. (2010). A proposed model of online

consumer behavior: Assessing the role of gender. *Journal of Business Research*, 63, 926–934.

Richard E. P., John T. C., David S. (1983). Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement, *Journal of Consumer Research*, Volume 10, Issue 2, 1 September 1983, Pages 135–146, <https://doi.org/10.1086/208954>

Rogers, E. M., & Cartano, D. G. (1962). Methods of measuring opinion leadership. *Public Opinion Quarterly*, 26, 435-441. doi:10.1086/267118.

Rogers, E. M.(1995). Diffusion of Innovations. Fourth Edition. The Free Press, New York. 518p.

Ruvio, A. & Shoham A., (2007). Innovativeness, Exploratory Behavior, Market Mavenship, and Opinion Leadership: An Empirical Examination in the Asian Context. *Psychology & Marketing*, Vol. 24(8): 703–722.

Senecal, S. & Nantel, J. (2004). The Influence of Online Product Recommendations on Consumers' Online Choices. *Journal of Retailing*, 80: 159-169.

Sengupta, J., Ronald C. G., and David S. B. (1997), All Cues Are Not Created Equal: Obtaining Attitude Persistence Under Low-Involvement Conditions. *Journal of Consumer Research*, 23 (March), 351–361.

Schmallegger, D., & Carson, D. (2008). Blogs in tourism: Changing approaches to information exchange. *Journal of Vacation Marketing*, 14(2), 99–110.

Solomon, M. R. (1996). *Consumer Behavior*, 3rd Edition, London: Prentice- Hall International, Inc.

Spears, N. & Singh, S. N. (2004). Measuring Attitude toward the Brand and Purchase Intentions. *Journal of Current Issues & Research in Advertising*, 26:2, 53-66. DOI: 10.1080/10641734.2004.10505164.

Spielman, H.M., (1981). The Celebrity Sell: Making it Work. *Marketing Times* 28, 13-14.

M. Sun. (2012). How does the variance of product ratings matter? *Management Science* 58 (4): 696–707.

Surana, R. (2008). The Effectiveness of celebrity endorsement in India. *A dissertation of MA in Marketing*. University of Aberdeen.

Till, B. D. (1998). Using celebrity endorsers effectively: lessons from associative learning. *Journal of Product & Brand Management*, vol. 7, no. 5.

Uzunoglu, E. & Kip, S. M. (2014). Brand communication through digital influencers: Leveraging blogger engagement. *International Journal of Information Management* 34: 592–602.

Van Der Merwe, R & Van Heerden, G. (2009). Finding and utilizing opinion leaders: Social networks and the power of relationships. *South African Journal of Business Management*. 40.

Wagner, C., & Bolloju, N. (2005). Supporting knowledge management in organizations with conversational technologies: discussion forums, weblogs, and wikis. *Journal of Database Management* 16 (2), i–viii.

Weathers, D., Sharma, S., and Wood, S. L. (2007). Effects of Online Communication Practices on Consumer Perceptions of Performance Uncertainty for Search and Experience Goods. *Journal of Retailing* (83:4), pp. 393-401.

Wei, P. S., Lu, H.-P. (2013). An examination of the celebrity endorsements and online customer reviews influence female consumers' shopping behavior. *Computers in Human Behavior* 29: 193–201.

Weimann, G. (1994). *The influentials. People who influence people*. Albany: State Uni-

versity of New York Press.

Wiley, D. (2014). Why brands should turn to bloggers instead of celebrity spokes- people. Marketing Land. Retrieved 13/11/2017 from: [http://marketingland.com/ brands-turn-bloggers-instead-celebrity-spokespeople-75971](http://marketingland.com/brands-turn-bloggers-instead-celebrity-spokespeople-75971).

Appendix A

Figures

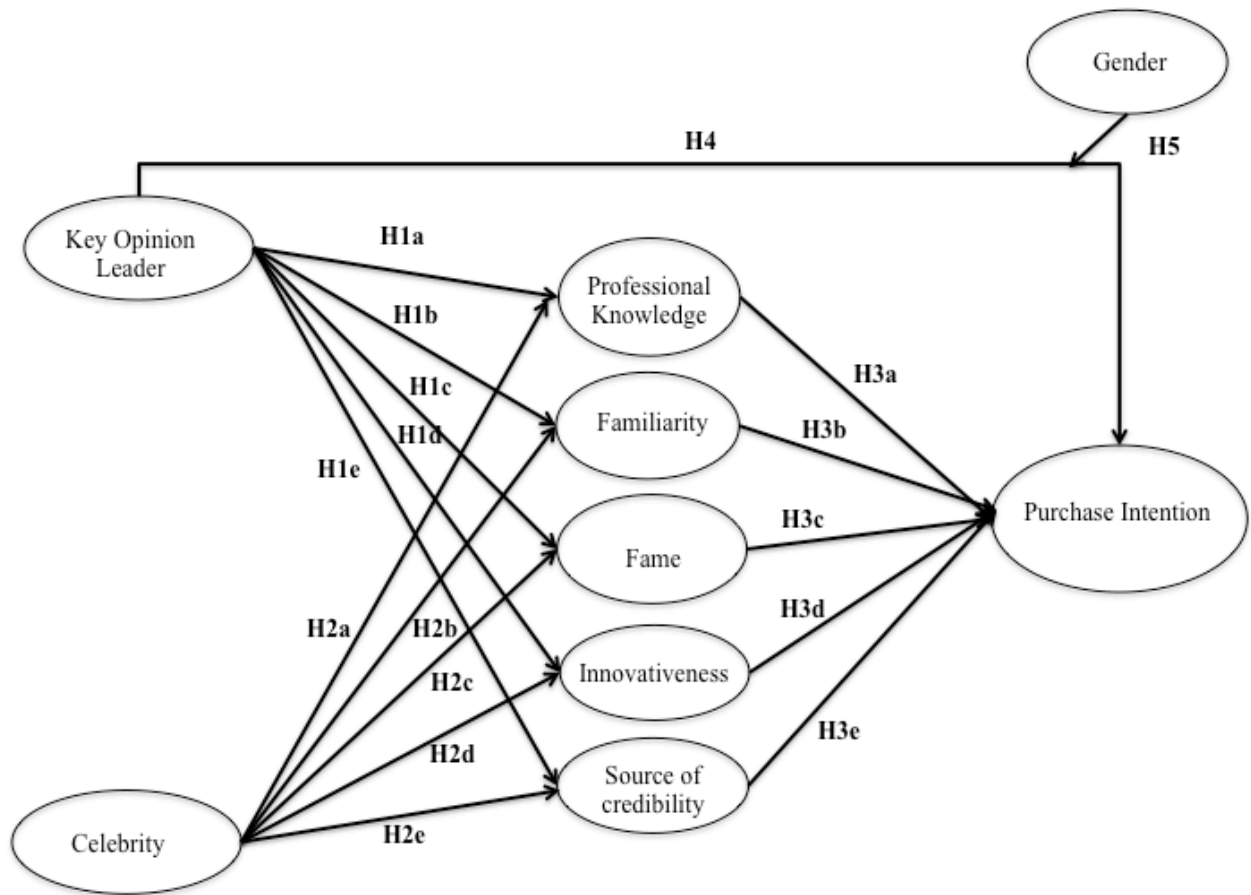


Figure 1. Research Model.

Appendix B

Tables

Table 1: Research design

	Control Group	KOL Group	Celebrity Group
Advertisement 1	Search good without any endorser	Search good with KOL as endorser	Search good with celebrity as endorser
Advertisement 2	Experience good without any endorser	Experience good with KOL as endorser	Experience good with celebrity as endorser

Table 2: Mean Values and Standard Deviation

Variables	Control	KOL	Celebrity
	M (SD)	M (SD)	M (SD)
Advertisement rating	3.38 (.74)	3.56 (.80)	3.34 (.90)
Professional knowledge	-	3.50 (.68)	3.42 (.75)
Familiarity*	-	2.64 (.97)	3.33 (.82)
Fame	-	3.15 (.64)	3.27 (.56)
Innovativeness*	-	2.94 (.81)	3.13 (.78)
Credibility source theory	-	1.85 (.30)	1.70 (.36)
Purchase intention	2.92 (.80)	2.96 (.93)	2.91 (.97)

Table 3. Correlations Table

	1	2	3	4	5	6	7
1. Experimental group	-						
2. Professional knowledge	0.053	-					
3. Familiarity	-.359**	.487**	-				
4. Fame	-0.100	.428**	.422**	-			
5. Innovativeness	-0.118	.641**	.561**	.450**	-		
6. Source of credibility	.210**	.628**	.228**	.241**	.506**	-	
7. Purchase intention	0.002	.469**	.302**	.247**	.562**	.423**	-

Table 4. Mediation Effects Summary

Independent variable	Mediator variable	a path	b path	c path	c' path	Mean indirect effect (a x b)	95% CI
KOL	Professional knowledge	-.0203	.6232**	-.1251	-.1251	-0.013	L = .48; U = 0.77
	Familiarity	.0437	.2990**			0.013	L = .19; U = .41
	Fame	.1018	.3994**			0.041	L = .22; U = .58
	Innovativeness	-.0898	.6602**			-0.059	L = .54; U = .78
	Source of credibility	-.1645	1.17**			-0.192	L = 0.87; U = 1.48

Table 5. Results Summary

Proposed hypotheses and results	Results
H1: Key opinion leader will have higher effectiveness on (a) perceived professional knowledge, (b) familiarity, (c) fame, (d) innovativeness, (e) source of credibility compare to celebrity for experience good	Rejected
H2: Celebrities will have higher effectiveness on (a) perceived professional knowledge, (b) familiarity, (c) fame, (d) innovativeness, (e) source of credibility compare to key opinion leader for search good	Rejected (only fame is supported)
H3: (a) Professional knowledge, (b) familiarity, (c) fame, (d) innovativeness, (e) source of credibility will affect purchase intention more positively for key opinion compare to celebrity.	Supported
H4: Key opinion leader will lead to a higher purchase intention compare to celebrity.	Rejected
H5: The relationship between key opinion leader and purchase intention will be stronger for female consumer than male consumer.	Rejected

Appendix C

Analysis Output

Hypothesis 1 a – e

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : purchase
 X : dummy_KO
 M : profknow

Sample
 Size: 266

OUTCOME VARIABLE:
 profknow

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.0863	.0075	1.0881	1.9824	1.0000	264.0000	.1603

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.8015	.2325	16.3519	.0000	3.3438	4.2593
dummy_KO	-.1898	.1348	-1.4080	.1603	-.4553	.0756

OUTCOME VARIABLE:
 purchase

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.5145	.2647	1.0852	47.3504	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	.9600	.3294	2.9145	.0039	.3114	1.6086
dummy_KO	-.0692	.1351	-.5121	.6090	-.3353	.1969
profknow	.5924	.0615	9.6375	.0000	.4713	.7134

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.0692	.1351	-.5121	.6090	-.3353	.1969

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
profknow	-.1124	.0789	-.2737	.0422

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : purchase
 X : dummy_KO
 M : familiar

Sample
 Size: 266

OUTCOME VARIABLE:
 familiar

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.0057	.0000	1.5637	.0087	1.0000	264.0000	.9259

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.2101	.2787	11.5186	.0000	2.6614	3.7588
dummy_KO	-.0151	.1616	-.0932	.9259	-.3333	.3032

OUTCOME VARIABLE:
 purchase

Model Summary

R	R-sq	MSE	F	df1	df2	p
.3218	.1036	.8238	15.1932	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.4902	.2480	10.0429	.0000	2.0020	2.9784
dummy_KO	-.1811	.1173	-1.5435	.1239	-.4120	.0499
familiar	.2360	.0447	5.2829	.0000	.1480	.3240

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.1811	.1173	-1.5435	.1239	-.4120	.0499

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
familiar	-.0036	.0382	-.0794	.0729

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

NOTE: Variables names longer than eight characters can produce incorrect output.
Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
Y : purchase
X : dummy_KO
M : fame_exp

Sample
Size: 266

OUTCOME VARIABLE:
fame_exp

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.0023	.0000	.5912	.0014	1.0000	264.0000	.9703

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.2726	.1714	19.0968	.0000	2.9352	3.6100
dummy_KO	.0037	.0994	.0373	.9703	-.1920	.1994

OUTCOME VARIABLE:

purchase

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.2972	.0883	.8378	12.7405	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.0968	.3148	6.6608	.0000	1.4770	2.7167
dummy_KO	-.1859	.1183	-1.5716	.1172	-.4188	.0470
fame_exp	.3517	.0733	4.8006	.0000	.2074	.4960

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.1859	.1183	-1.5716	.1172	-.4188	.0470

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
fame_exp	.0013	.0357	-.0673	.0768

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

```
*****
Model   : 4
  Y     : purchase
  X     : dummy_KO
  M     : inovativ
```

Sample
Size: 266

```
*****
OUTCOME VARIABLE:
  inovativ
```

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.0913	.0083	1.0704	2.2176	1.0000	264.0000	.1376

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.4711	.2306	15.0537	.0000	3.0171	3.9251
dummy_KO	-.1991	.1337	-1.4892	.1376	-.4624	.0642

```
*****
OUTCOME VARIABLE:
  purchase
```

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.5469	.2991	.6441	56.1099	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.5172	.2438	6.2222	.0000	1.0371	1.9973
dummy_KO	-.0853	.1042	-.8193	.4134	-.2904	.1198
inovativ	.4986	.0477	10.4428	.0000	.4046	.5926

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.0853	.1042	-.8193	.4134	-.2904	.1198

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
inovativ	-.0993	.0642	-.2248	.0299

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : purchase
 X : dummy_KO
 M : cred_exp

Sample
 Size: 266

OUTCOME VARIABLE:
 cred_exp

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.0558	.0031	.8297	.8244	1.0000	264.0000	.3647

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.7800	.2030	18.6202	.0000	3.3803	4.1797
dummy_KO	-.1069	.1177	-.9080	.3647	-.3387	.1249

OUTCOME VARIABLE:
 purchase

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.4653	.2165	.7200	36.3312	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.4368	.2876	4.9951	.0000	.8704	2.0031
dummy_KO	-.1334	.1098	-1.2145	.2256	-.3497	.0829
cred_exp	.4791	.0573	8.3563	.0000	.3662	.5920

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.1334	.1098	-1.2145	.2256	-.3497	.0829

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI

cred_exp -.0512 .0580 -.1656 .0636

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Hypothesis 2 a – e

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
Y : purchase
X : dummy_Ce
M : profknow

Sample
Size: 266

OUTCOME VARIABLE:
profknow

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.0726	.0053	.6787	1.4002	1.0000	264.0000	.2378

Model						
	coeff	se	t	p	LLCI	ULCI
constant	3.6615	.1889	19.3824	.0000	3.2896	4.0335
dummy_Ce	-.1282	.1083	-1.1833	.2378	-.3415	.0851

OUTCOME VARIABLE:
purchase

Model Summary

R	R-sq	MSE	F	df1	df2	p
.2511	.0630	.8610	8.8478	2.0000	263.0000	.0002

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.9983	.3312	6.0332	.0000	1.3461	2.6505
dummy_Ce	-.0313	.1223	-.2559	.7983	-.2722	.2096
profknow	.2890	.0693	4.1692	.0000	.1525	.4255

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.0313	.1223	-.2559	.7983	-.2722	.2096

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
profknow	-.0370	.0329	-.1057	.0241

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : purchase
 X : dummy_Ce
 M : familiar

Sample

Size: 266

OUTCOME VARIABLE:

familiar

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.0155	.0002	1.0987	.0634	1.0000	264.0000	.8014

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.7123	.2404	11.2843	.0000	2.2391	3.1856
dummy_Ce	.0347	.1378	.2518	.8014	-.2367	.3061

OUTCOME VARIABLE:

purchase

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.1944	.0378	.8842	5.1652	2.0000	263.0000	.0063

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.5824	.2625	9.8366	.0000	2.0655	3.0994
dummy_Ce	-.0744	.1237	-.6018	.5479	-.3179	.1691
familiar	.1748	.0552	3.1662	.0017	.0661	.2835

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.0744	.1237	-.6018	.5479	-.3179	.1691

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
familiar	.0061	.0259	-.0480	.0582

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : purchase

X : dummy_Ce
M : fame_sea

Sample
Size: 266

OUTCOME VARIABLE:
fame_sea

Model Summary

R	R-sq	MSE	F	df1	df2	p
.1221	.0149	.4905	3.9954	1.0000	264.0000	.0466

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.4597	.1606	21.5422	.0000	3.1435	3.7759
dummy_Ce	-.1841	.0921	-1.9988	.0466	-.3654	-.0027

OUTCOME VARIABLE:
purchase

Model Summary

R	R-sq	MSE	F	df1	df2	p
.1238	.0153	.9049	2.0463	2.0000	263.0000	.1313

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.4932	.3622	6.8827	.0000	1.7800	3.2065
dummy_Ce	-.0384	.1260	-.3045	.7610	-.2865	.2098
fame_sea	.1628	.0836	1.9479	.0525	-.0018	.3274

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.0384	.1260	-.3045	.7610	-.2865	.2098

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
fame_sea	-.0300	.0258	-.0902	.0113

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : purchase
 X : dummy_Ce
 M : inovativ

Sample
 Size: 266

OUTCOME VARIABLE:
 inovativ

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.0038	.0000	.7137	.0039	1.0000	264.0000	.9502

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.9393	.1937	15.1726	.0000	2.5579	3.3207
dummy_Ce	-.0069	.1111	-.0625	.9502	-.2257	.2118

OUTCOME VARIABLE:
 purchase

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.4072	.1658	.7666	26.1374	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.7056	.2747	6.2089	.0000	1.1647	2.2465
dummy_Ce	-.0652	.1151	-.5660	.5719	-.2918	.1615
inovativ	.4596	.0638	7.2057	.0000	.3340	.5852

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.0652	.1151	-.5660	.5719	-.2918	.1615

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
inovativ	-.0032	.0544	-.1114	.1059

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
 95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
 5000

NOTE: Variables names longer than eight characters can produce incorrect output.
 Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : purchase
 X : dummy_Ce
 M : cred_sea

Sample
 Size: 266

OUTCOME VARIABLE:
 cred_sea

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.0423	.0018	.4694	.4728	1.0000	264.0000	.4923

Model							
	coeff	se	t	p	LLCI	ULCI	
constant	3.4567	.1571	22.0021	.0000	3.1473	3.7660	
dummy_Ce	.0619	.0901	.6876	.4923	-.1154	.2393	

OUTCOME VARIABLE:
 purchase

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.4265	.1819	.7518	29.2378	2.0000	263.0000	.0000

Model							
	coeff	se	t	p	LLCI	ULCI	
constant	1.0040	.3347	2.9998	.0030	.3450	1.6631	
dummy_Ce	-.1051	.1141	-.9213	.3578	-.3298	.1196	

cred_sea .5938 .0779 7.6234 .0000 .4404 .7472

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.1051	.1141	-.9213	.3578	-.3298	.1196

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
cred_sea	.0368	.0538	-.0684	.1475

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Hypothesis 3 a – e

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : purchase
 X : dummy_KO
 M : profknow

Sample
 Size: 266

OUTCOME VARIABLE:
 profknow

Model Summary

R	R-sq	MSE	F	df1	df2	p
.0135	.0002	.5169	.0479	1.0000	264.0000	.8270

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.5002	.1602	21.8444	.0000	3.1847	3.8157

dummy_KO -.0203 .0929 -.2188 .8270 -.2033 .1626

OUTCOME VARIABLE:

purchase

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.4772	.2277	.7097	38.7698	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.0666	.3146	3.3905	.0008	.4472	1.6861
dummy_KO	-.1719	.1089	-1.5791	.1155	-.3864	.0425
profknow	.6232	.0721	8.6409	.0000	.4812	.7652

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.1719	.1089	-1.5791	.1155	-.3864	.0425

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
profknow	-.0127	.0597	-.1309	.1055

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : purchase
 X : dummy_KO
 M : familiar

Sample

Size: 266

OUTCOME VARIABLE:

familiar

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.0214	.0005	.9446	.1209	1.0000	264.0000	.7283

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.9055	.2166	13.4139	.0000	2.4790	3.3320
dummy_KO	.0437	.1256	.3478	.7283	-.2036	.2910

OUTCOME VARIABLE:

purchase

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.3173	.1007	.8264	14.7228	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.3790	.2627	9.0550	.0000	1.8617	2.8964
dummy_KO	-.1977	.1175	-1.6821	.0937	-.4291	.0337
familiar	.2990	.0576	5.1939	.0000	.1857	.4124

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.1977	.1175	-1.6821	.0937	-.4291	.0337

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
familiar	.0131	.0385	-.0598	.0934

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
 Y : purchase
 X : dummy_KO
 M : fame_tot

Sample
 Size: 266

OUTCOME VARIABLE:
 fame_tot

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.0790	.0062	.3743	1.6585	1.0000	264.0000	.1989

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.0457	.1363	22.3389	.0000	2.7773	3.3142
dummy_KO	.1018	.0791	1.2878	.1989	-.0539	.2575

OUTCOME VARIABLE:
 purchase

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.2714	.0736	.8513	10.4547	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.0314	.3496	5.8108	.0000	1.3430	2.7197
dummy_KO	-.2253	.1196	-1.8833	.0608	-.4608	.0103
fame_tot	.3994	.0928	4.3026	.0000	.2166	.5822

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.2253	.1196	-1.8833	.0608	-.4608	.0103

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
fame_tot	.0407	.0350	-.0196	.1190

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
Y : purchase
X : dummy_KO
M : inovativ

Sample
Size: 266

OUTCOME VARIABLE:
inovativ

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.0529	.0028	.6533	.7396	1.0000	264.0000	.3906

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.1832	.1801	17.6712	.0000	2.8286	3.5379
dummy_KO	-.0898	.1045	-.8600	.3906	-.2955	.1158

OUTCOME VARIABLE:
purchase

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.5652	.3195	.6254	61.7368	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.1462	.2604	4.4017	.0000	.6335	1.6589
dummy_KO	-.1253	.1023	-1.2243	.2219	-.3268	.0762
inovativ	.6602	.0602	10.9641	.0000	.5416	.7788

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.1253	.1023	-1.2243	.2219	-.3268	.0762

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
inovativ	-.0593	.0668	-.1897	.0729

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

NOTE: Variables names longer than eight characters can produce incorrect output.
Shorter variable names are recommended.

----- END MATRIX -----

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.00 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4
Y : purchase
X : dummy_KO
M : cred_tot

Sample
Size: 266

OUTCOME VARIABLE:
cred_tot

Model Summary

R	R-sq	MSE	F	df1	df2	p
.0238	.0006	.1175	.1497	1.0000	264.0000	.6991

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.8088	.0764	23.6777	.0000	1.6584	1.9592
dummy_KO	-.0171	.0443	-.3870	.6991	-.1044	.0701

OUTCOME VARIABLE:
purchase

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.4312	.1860	.7481	30.0385	2.0000	263.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.1205	.3407	3.2890	.0011	.4497	1.7913
dummy_KO	-.1645	.1118	-1.4708	.1425	-.3846	.0557
cred_tot	1.1761	.1553	7.5729	.0000	.8703	1.4819

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.1645	.1118	-1.4708	.1425	-.3846	.0557

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
cred_tot	-.0202	.0550	-.1332	.0862

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

Hypothesis 4

Model Summary^c

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.120 ^a	.014	.009	.90161	.014	2.877	2	397	.058
2	.269 ^b	.072	.058	.87902	.058	6.166	4	393	.000

a. Predictors: (Constant), dummy_KOL, dummy_Celebrity

b. Predictors: (Constant), dummy_KOL, dummy_Celebrity, Income, Gender, Educational background, Age

c. Dependent Variable: purchase_total

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.677	2	2.338	2.877	.058 ^b
	Residual	322.723	397	.813		
	Total	327.400	399			
2	Regression	23.735	6	3.956	5.120	.000 ^c
	Residual	303.664	393	.773		
	Total	327.400	399			

a. Dependent Variable: purchase_total

b. Predictors: (Constant), dummy_KOL, dummy_Celebrity

c. Predictors: (Constant), dummy_KOL, dummy_Celebrity, Income, Gender, Educational background, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.691	.324		11.408	.000
	dummy_Celebrity	-.205	.111	-.108	-1.857	.064
	dummy_KOL	-.251	.111	-.131	-2.255	.025
2	(Constant)	4.233	.376		11.256	.000
	dummy_Celebrity	-.249	.108	-.131	-2.302	.022
	dummy_KOL	-.263	.109	-.137	-2.410	.016
	Gender	.124	.093	.066	1.337	.182
	Educational background	-.113	.047	-.137	-2.411	.016
	Age	-.211	.079	-.165	-2.694	.007
	Income	.052	.056	.055	.927	.355

a. Dependent Variable: purchase_total

Appendix D

Questionnaire

Demographics

The first questions is about respondent's background.

1. What is your **gender**?

- male
- female

2. What is your **age**?

- 17 – 25 years old
- 25 – 35 years old
- 35 – 45 years old
- >45 years old

3. What is the highest **educational** degree or level of school you have completed? If currently enrolled, highest degree received.

- no schooling completed
- high school
- diploma or the equivalent
- Bachelor's degree
- Master's degree
- Doctorate degree

4. What is your income range?

- < Rp 2.500.000,- (156 Euro)
- Rp 2.500.000,- - Rp 7.500.000,- (156 – 468 Euro)
- Rp 7.500.000,- - Rp 15.000.000,- (468 – 936 Euro)
- Rp 15.000.000,- - Rp 25.000.000,- (936 – 1560 Euro)
- > Rp 25.000.000,- (> 1560 Euro)

The next questions concern your social media usage in general:

Social Media Usage

1. Do you have Social Media account? Yes/No

2. What kind of social media do you have?

- Instagram
- Facebook
- Twitter
- Youtube
- Other kind of social media

3. Frequency:

a. Frequency of use: 1 = occasionally, 2 = a few days per month, 3 = a few days per week, 4 = daily

- b. How often do you go to your favorite social media? - 1 = several times per month, 2 = several times per week, 3 = once per day, 4 = 2 – 5 times per day, 5 = 6 – 10 times per day, 6 = more than 10 times per day
4. What is your purpose using social media? 1 = to keep in contact and share experiences with friends, 2 = streaming music/ video/ photos, 3 = uploading music/ video/ photos, 4 = blogging, 5 = creating polls/ quizzes or surveys, 6 = chatting 7 = finding news/ information

PART 2.

Thank you for your responses. Please take a moment to look at the print ad on the next page. They are followed by questions about your spontaneous impressions.

PRINT AD

In this part, every respondent will get 2 types of advertisement (search good & experience good) and for each advertisement; they will get several questions below

Rate the ad that you just saw:

- 1 = Unappealing – 5 = appealing
- 1 = Bad – 5 = good
- 1 = Unpleasant – 5 = pleasant
- 1 = Unfavorable – 5 = favorable
- 1 = Unlikable – 5 = likable

Mediator Variables

- Professional knowledge (familiarity & professional knowledge). How do you find the celebrity/ KOL in the advertisement? (Netemeyer and Bearden (1992), 1 = strongly disagree, 5 = strongly agree
 - o Knowledgeable
 - o Competent
 - o Expert
 - o Trained
 - o Experienced
 - o Informed
- Familiarity & perceived product involvement (Chan and Misra, 1990; Miciak & Shanklin, 1994), 1 = strongly disagree, 5 = strongly agree
 - o I recognize the celebrity/ KOL
 - o I like the celebrity/ KOL
 - o The celebrity/ KOL seems friendly to me
- Fame (Li, 2007; Bansal, 2000, Maltby et al.'s (2008)), rating the presence of the characteristics in the endorser figure from 1 = strongly not present, 5 = strongly present

- Ambitious
 - Always seek to compare to others
 - Attention seeking
 - Conceitedness
 - Social access
 - Psychological vulnerability
 - Glamour
- Innovativeness (Rogers & Shoemaker, 1995)
- I often seek this person's opinion about some issues that is currently happening
 - This person often try new ideas
 - His/ her way of thinking is creative and original
 - He/ she is the leading figure for the field
- Credibility Source Theory (expertiseness, trustworthiness, attractiveness) (Hovland et al., 1953; Ohanian, 1991; Erdogan, 1999)
- honest/dishonest, reliable/unreliable, sincere/insincere, trustworthy/untrustworthy, attractive/unattractive, classy/not classy, beautiful/ugly, elegant/plain, expert/not an expert, experienced/inexperienced, knowledgeable/unknowledgeable, qualified/unqualified

Dependent Variable – Purchase Intention

Please describe your overall feelings about the brand described in the ad you just read (Abelson et al. 1982; Edell and Burke 1987, p. 423)

1 = Definitely do not intend to buy it – 5 = definitely intend to buy it

1 = Very low purchase interest – 5 = high purchase interest

1 = Definitely not buy it – 5 = definitely buy it

1 = Probably not buy it – 5 = probably buy it

Appendix E

Stimuli













Samsung
GALAXY ALPHA
YOUR STYLE YOUR ALPHA



Marques Brownlee
YouTuber, social media influencer
The best technology and gadget reviewer

This advertisement features Marques Brownlee, a prominent tech reviewer, in a grey t-shirt with a graphic and a smartwatch. The background is a blurred city street at night with warm lights. The Samsung Galaxy Alpha logo and slogan are centered in the upper left, with an image of the phone below it.



Samsung
GALAXY ALPHA
YOUR STYLE YOUR ALPHA



Justin Bieber
Singer and songwriter

This advertisement features Justin Bieber, a popular singer, in a dark suit and tie. The background is a blurred city street at night with warm lights. The Samsung Galaxy Alpha logo and slogan are centered in the upper left, with an image of the phone below it.



Samsung
GALAXY ALPHA
YOUR STYLE YOUR ALPHA

Abstract

The recent rise of key opinion leaders on social media, including bloggers, YouTubers, and Instagram influencers, is a relatively new topic in our 21st century digital reality, and thus has not been fully examined by researchers. One neglected area is how these key opinion leaders affect their audience's purchase intentions. This study investigated what effect key opinion leaders, mediated by their characteristics (professional knowledge, familiarity, fame, innovativeness, and credibility) and moderated by gender, have on purchase intentions as opposed to celebrity endorsers. An experiment was conducted where respondents were divided into three groups (control, key opinion leaders group, and celebrity endorsers group) and asked to answer questions about two advertisements. Results indicated that the stimulus did not affect the mediator variables, likely because respondents could not relate themselves to the key opinion leaders or celebrities used in the stimuli. However, partial mediation effects were present, indicating a positive relationship between key opinion leaders and purchase intention. This finding suggests that companies should certainly consider using key opinion leaders as alternatives to celebrity endorsers by taking the characteristics of key opinion leaders into account when preparing product advertisements.

Keywords: key opinion leader, celebrities endorsement, purchase intention, advertising, experimental research, search good, experience good.

Zusammenfassung

Der jüngste Aufstieg wichtiger Meinungsmacher_innen, „key opinion leader“ in sozialen Medien, ebenso Blogger, Youtuber und Instagramer, ist ein relativ neues Thema im digitalen Zeitalter des 21. Jahrhunderts und wurde damit von Forschenden noch nicht vollständig untersucht. Ein vernachlässigter Forschungsbereich ist wie diese Meinungsmacher_innen die Kaufabsichten ihrer Zielgruppen beeinflussen. Diese Studie untersuchte die Wirkungen von Meinungsmacher_innen, vermittelt anhand besonderer Merkmale (Expert_innenwissen, Bekanntheitsgrad, Ruhm, Erfahrungsreichtum und Glaubwürdigkeit) und nach Geschlechtern moderiert, auf die Kaufabsichten im Gegensatz zu prominenten Vertreter_innen. Das Untersuchungsdesign wurde so angelegt, dass die Untersuchungsteilnehmer_innen in drei Gruppen (Kontrolle, Meinungsmacher_innen, prominente Vertreter_innen) eingeteilt wurden und Fragen zu zwei Werbeanzeigen beantworten sollten. Die Ergebnisse deuten darauf hin, dass der Stimulus die Mediatorvariablen nicht beeinflusste, wahrscheinlich weil die Befragten sich nicht mit den wichtigsten Meinungsführern oder Berühmtheiten, die in den Reizen verwendet wurden, identifizieren konnten. Es gab jedoch teilweise Vermittlungseffekte, die auf eine positive Beziehung zwischen den wichtigsten Meinungsführern und der Kaufabsicht hinwiesen. Dieses Ergebnis deutet darauf hin, dass Unternehmen die Verwendung wichtiger Meinungsführer_innen als Alternativen zu Celebrity-Endorsern in Erwägung ziehen sollten, indem sie die Eigenschaften der wichtigsten Meinungsführer_innen bei der Erstellung von Produktanzeigen berücksichtigen.

Stichwörter: Schlüssel Meinungsführer, Prominente Billigung, Kaufabsicht, Werbung, experimentelle Forschung, Suche gut, Erfahrung gut.