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Abstract

Spokesperson race and expertise have exhibited an impact on audiences. This study examines the effect of race congruency between vlogger and audience in regards to weight loss. Using social psychology and communication theories, including Elaboration Likelihood Model, spokesperson effects, the Theory of Planned Behavior, social cognitive theory, and self-efficacy theory, the current study features independently produced vlogs (video blogs) discussing weight loss strategies. The race and expertise of the vloggers in the videos were manipulated to test the effects on perceived message and source credibility, self-efficacy towards exercising and dieting, and behavioral intentions towards exercising and dieting.

Results reveal that, although race congruency demonstrates limited effect on the outcome variables, it interacts with participant race, ethnic identity, and vlogger expertise to predict perceived message credibility, self-efficacy towards exercising and dieting, and behavioral intentions towards exercising and dieting. Asian American participants report greater perceived message credibility and behavioral intentions towards exercising and dieting after watching an Asian American vlogger compared to a White American vlogger. Asian American participants with low ethnic identity report greater self-efficacy towards exercising and dieting after watching an Asian American vlogger compared to a White American vlogger, while White American participants with low ethnic identity report greater self-efficacy towards exercising after watching an Asian American vlogger compared to a White American vlogger. Furthermore, perceived message credibility mediates the effect of the interaction of race congruency and participant race on participant's behavioral intentions towards exercising and dieting. This study provides insights for understanding spokesperson effect and designing health campaigns in the interactive media environment.

EFFECTS OF VLOGGER RACE ON PERCEIVED CREDIBILITY, SELF-EFFICACY AND
BEHAVIORAL INTENTIONS TOWARDS WEIGHT LOSS

by

Mengmeng Tang

B.A., University of Nottingham Ningbo China, 2014

Master Thesis

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Master of Arts in *Media Studies*.

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Chapter 1: Introduction

LaKeisha Shurn, 34, from San Francisco, decided to change her body, and therefore her life, in the beginning of 2014. Her weight dropped from 348 pounds to 297 pounds, and her success story in weight loss has gone viral on the Internet (Matthews, 2014). She started the #giveit100 challenge, and uploaded her workout videos to YouTube for 100 days. The video that documented her transformation has been viewed over 2,400,000 times since January 2014 (Give it 100, 2014). LaKeisha soon became a role model for people who want to lose weight. A viewer commented on YouTube, “thank you for your inspirational video! I am on the journey to lose weight and re-invigorate myself and you reinforced that it can and will be done” (Serrano, 2014). LaKeisha has inspired thousands of people to start their own weight loss journey due to emerging interactive media like YouTube.

Obesity is constructed as a health risk in modern American society. The World Health Organization (2015) defines obesity as abnormal or excessive fat accumulation that may impair health. According to the World Health Organization (2015), about 13% of the world population (11% of men and 15% of women) was obese in 2014. Approximately 32% of men and 34% of women in the United States are obese (Murray, Ng, & Mokdad, 2014).

However, people who want to lose weight do not need to be obese or over-weight. Women were shown to have much more concern about their body images than men do (Anderson, Woodward, Spalter & Koss, 1993). This concern about body image, in part, supports the idea that concerns about weight are also more salient among women than men. Women prefer thinner body figures than their current ones. According to Mable, Balance and Galgan (1986), young women were normally 5% below their average weight, while they still considered themselves as 10% overweight.

Thin female figures are widely presented in the mainstream media. About 94% of female characters in American TV programs are thinner than average American females, and these thin women in media are always associated with happiness, attractiveness, desirability, and success in life (Yamamiya, Cash, Melnyk, Posavac, & Posavac 2005, Hesse-Biber, Leavy, Quinn, & Zoino, 2006). Thinness is given many positive connotations by media, so that women tend to develop excessive concern about their body weight and shapes, and even consider their body image as the “measuring stick” of social value.

A blog, short for web log, is a type of Web 2.0 platform, which leverages the Web in an interactive and collaborative manner. A blog is an online journal where people record their thoughts and ideas, and also interact with readers through comments. At one time, blogs were considered the “single most transformative media technology since the invention of the printing press” (Drezner & Farrell, 2004, p. 33). Blogs were first used by people to discuss news and politics, but they are now used by millions of people to discuss anything of interest (Blood, 2002). According to Kumar, Novak, Raghavan, and Tomkins’ (2004) analysis of 1.3 million blog sites, the topics being discussed range from Existentialism to Russian hackers. Blogs provide a way for people to socialize with each other, and can ultimately break down societal and organizational barriers (Kiesler, 1986).

A video blog (or vlog) is a blog that takes the form of a video. The most well known platform for vlogs is YouTube.com. Founded in 2005, it has 800 million active users, with 4 billion hours of video being viewed, each month (YouTube, 2015). According to Luers (2007), there are three main types of vlogs on YouTube: personal vlogs, news shows, and entertainment-oriented vlogs. According to Christian (2009), personal vlog comprises a head-on close-up shot

and the vlogger looks at the camera to discuss the details about their life and recent happenings in their life.

The term “losing weight” has become a buzzword on the Internet. Google’s search data listed the top ten phrases users searched in regard to losing weight; they were “how to lose weight fast,” “how to eat to lose weight,” and “how to exercise to lose weight” (Voakes, 2011). These key phrases are also very popular in YouTube searches. YouTube, as the biggest platform for user-generated videos, is a source for “how-to” videos. There are about 5,920,000 results when searching “how to lose weight” in the YouTube search engine (see Figure 1.1). One of the most viewed weight loss video on YouTube is a vlog, in which a girl called Abigale Kristen is talking about her weight loss journey (Abigale Kristen, 2013). She lost 40 pounds successfully by eating low-sugar foods and by drinking green tea. The video has reached over 13,000,000 views; and Abigale has over 149,000 subscribers to her channel (Abigale Kristen, 2016). There are a lot of people like Abigale who post their weight loss journey and share their successful tips on YouTube. There are about 555,000 results when searching “how to lose weight vlog” on YouTube (see Figure 1.2).

Prior research has examined weight loss blogs and the interaction between bloggers and readers. According to Leggatt-Cook and Chamberlain (2012), the weight-loss blogosphere is an online community where bloggers rely on readers for accountability, and readers receive encouragement and inspiration from bloggers. The interaction between bloggers and readers turns weight loss into a collaborative project, where bloggers and readers validate each other (Serfaty, 2004). This dynamic, however, seems to occur most often between women, and more specifically, White American women.

Most weight loss blogs are owned by White American women. According to *Healthline's* list of the eighteen best weight loss blogs in 2015, seventeen are owned by females, and the other one is owned by a team. Among these seventeen bloggers, sixteen are White Americans, and one is Black American (Healthline, 2015). Only one out of nine of “the most inspiring weight-loss bloggers” nominated by *Shape Magazine* is a person of color (Shape Magazine, 2015). According to the blog, *Diet-to-go*, of “the 100 most inspirational weight loss bloggers in 2013,” the majority is owned by White American women (Diet-to-go, 2013). Source race has been shown as a factor that affects audience’s perception of the message, thus it is important to investigate how audience reacts to a racially congruent blogger and a racially incongruent blogger.

The interactive and collaborative nature of Web 2.0 fosters user-generated content, but also leaves these contents unregulated. It is difficult to verify source expertise in the interactive media environment, such as blogs and vlogs. The arguments in weight loss blogs and vlogs can be problematic and the weight loss tips do not necessarily apply to everybody. According to Larsen, Neumark-Sztainer, and Story (2009), 45% of females and 17% of males are engaged in unhealthy weight control behaviors. Thus, it is important to investigate how source expertise works in the interactive media environment.

This research will address the question:

What is the effect of a vlogger race and expertise on viewers’ perceived credibility, self-efficacy and behavioral intentions towards weight loss?

This study examines the spokesperson effect in regards of conveying health-related messages. Using social psychology and communication theories, including Elaboration Likelihood Model, spokesperson effects, the Theory of Planned Behavior, social cognitive theory, and self-efficacy theory, this study compares videos about losing weight that have been produced by the researcher. Videos feature four female speakers (two White Americans, two Asian Americans) reading a brief prepared script in a casual vlog format. Viewers then respond to items assessing their attitudes, self-efficacy and behavioral intentions regarding dieting and exercise as well as perceived credibility of the source and the message. This study investigates the effect of user-generated weight loss content on audience. The results from this research benefit scholars, researchers, and industry professionals seeking to understand spokesperson effect in the interactive media environment.

The following chapters will take a closer look at spokesperson effect on female audience in regards to weight loss. Chapter 2 will cover relevant theories and prior research. Chapter 3 will describe methodologies. Chapter 4 will discuss the results of this study and, finally, Chapter 5 will discuss the findings and make suggestions for future research.

Chapter 2: Literature review

Persuasion is defined as “human communication that is designed to influence others by modifying their beliefs, values, or attitudes” (Simons, 1976, p. 21). Research in persuasion theory is constantly looking for ways to deliver messages effectively and ultimately generate desired attitudes and behaviors. In this chapter, I will take a closer look at the Elaboration Likelihood Model of persuasion, spokesperson effect, the Theory of Planned Behavior, social cognitive theory and self-efficacy theory as it relates to health promotion and weight loss.

1. The Elaboration Likelihood Model

The Elaboration Likelihood Model (ELM) predicts the multiple ways in which attitudes are formed and behavioral intentions are altered. Elaboration refers to the extent to which a person thinks about the issue-relevant argument contained in a message (Petty & Cacioppo, 1986). According to Petty, Barden, and Wheeler (2009), there are four critical determinants of effective persuasion: characteristics of the message source (e.g., perceived credibility of the source), the message itself (e.g., level of complexity, number of arguments, rational or emotional appeals), the recipients of the message and the context in which the message is presented. The ELM states that any variable can influence attitudes and behavioral intentions in different ways and can serve to either enhance or weaken persuasion by affecting the likelihood of elaboration (Petty, et al., 2009). The ELM organizes multiple persuasion processes into two routes: the central route and the peripheral route.

The central route to persuasion involves careful consideration of the message and linkage of the message to one’s internal knowledge (Petty, et al., 2009). Two conditions are necessary for the central route processing to occur: the recipient of the message must have both the

motivation and the ability to think carefully (Petty, et al., 2009). A person will be motivated to think if the message is personally relevant (Petty & Cacioppo, 1979). Rothman and Schwarz's (1998) research demonstrated that a woman who had a family history of breast cancer was more likely to process the message about breast self-exams through the central route, since she had high perceived self-relevance with the message. Petty, et al. (2009) argued that distraction in the context influences people's ability to think and it would be difficult to think carefully about a message that is delivered in the hall of a busy hospital.

However, people do not always have the motivation or the ability to think carefully about every piece of persuasive information they encounter. Recipients of message are more likely to deploy the peripheral route to persuasion, using simple cues or mental shortcuts to process information. Attitude changes occur via the peripheral route because message recipients make simple inferences about the merits of the message based on various simple cues. Such simple cues include perceived credibility of the source and the number of arguments in the message (Petty & Cacioppo, 1984). According to Chaiken and Maheswaran (1994), people are more likely to generate favorable thoughts about a message if the source is considered as credible. In addition, people tend to believe that "the more argument the better" when they are unmotivated or unable to think about the message (Petty & Cacioppo, 1984). People also use mental shortcuts to process information when they are unmotivated or unable to think about the substantive arguments in the message. Mental shortcuts might be used so that a message from an expert is judged based on the heuristic that "experts are generally correct," (Chaiken, 1987).

Central and peripheral routes differ on the extent to which recipients elaborate the message. If the recipient has both motivation and ability to think carefully, she is highly likely to elaborate and will deploy the central route to persuasion, while if the recipient has neither

motivation nor ability to think carefully, she is less likely to elaborate and will deploy the peripheral route to persuasion.

The central route and the peripheral route do not function separately. The ELM states that persuasion occurs along “an elaboration continuum” (Petty, et al., 2009, p.189). The continuum stretches from processes requiring no thinking to processes requiring some effort to processes requiring careful consideration (Petty, et al., 2009). In this elaboration continuum, the central route and the peripheral route to persuasion take place at the same time and can influence message recipients’ attitudes simultaneously (Petty, 1994). For example, if a celebrity is the source of a message about weight loss, people who use the mental shortcut that “famous is good” are likely to go down the peripheral route to persuasion. On the other hand, people who know she has successfully lost weight and has expertise of the topic will follow the central route of information processing.

Attitudes elicited by the central route are better predictors of behavior. Attitudes generated from the central route to persuasion are more likely to be stronger than those generated from the peripheral route, and recipients will integrate the attitudes generated from the central route into their overall belief structure. They are also more likely to increase the chance of eliciting sustained behavioral change (Petty, et al., 2009). Even though the strength of the arguments does not play an important role in the peripheral route to persuasion, the peripheral route of information processing still has an impact on message recipients’ attitudes and behavioral intentions, at least in the short term (Petty, et al., 2009).

The Elaboration Likelihood Model has been applied to the promotion of various health behaviors, such as exercise (Rosen, 2000), dieting counseling (Kerssens & van Yperen, 1996) and weight loss (Kreuter, Bull, Clark, & Oswald, 1999). According to Petty, et al. (2009), the

optimal method to convey a health promotion message is to use the peripheral route in combination with the central route. Using peripheral cues at first can make a health behavior more acceptable to an unmotivated audience. When the audience gets more involved, more central processing techniques can be employed (Petty, et al., 2009). For example, weight loss campaigns could first employ peripheral cues, such as using celebrity endorsements and using incentives to promote participation, to draw people's attention to the issue. After people are more interested in the campaign, classes taught by fitness instructors and nutritionists could be involved to lead people to the central route of processing. The ELM provides a unique way to understand message recipients' thoughts and actions. It also helps guide researchers and practitioners to create more effective messages in order to motivate people to engage in health behaviors.

2. Spokesperson effects

2.1 Spokesperson's characteristics

A spokesperson's characteristics, including physical appearance, race and expertise, have significant effects on how audiences perceive the credibility of the source and process the message. A spokesperson's physical appearance, such as skin tone and facial features, is an indispensable determinant of an audience's processing of the information (Arpan, 2002), and research revealed that ads that featured local models were preferred by consumers, compared to those featured foreign models (Ueltschy & Ryans, 1997). Past research also demonstrated that individuals were more likely to seek out information from those who possessed similar physical attributes or perceived cultural similarity with them (Spence, Lachlan, & Griffin, 2007).

2.1.1 Spokesperson race

A spokesperson's race has an impact on audience's processing of information. Whittler (1991) and Whittler and DiMeo (1991) investigated the effects of actor race on commercial advertising, and found that White participants had more favorable attitudes towards the product (laundry detergent) and were more likely to purchase the product when the commercial featured a racially congruent spokesperson. Similarly, Black participants reported increased likelihood of purchase when the commercial featured a racially congruent actor. That is, racial congruency results in greater effects for both White and Black participants. According to Appiah (2001), Black adolescents responded more positively to racially congruent character ads than racially incongruent character ads. In the advertising context, seeing racially congruent spokesperson elicits greater positive attitudes towards the product and greater purchase intentions (Appiah, 2001). Therefore, spokesperson race has an impact on audience's attitudes and behavioral intentions.

Prior literature on spokesperson effect of race mainly compared White and Black, however, inter-racial communications is far more than solely studying White and Black. There is a very limited amount of research investigating other minority groups, such as comparing White Americans and Asian Americans (Corstie-Massay, 2016). In addition, the majority of prior literature on spokesperson race focused on the superficial aspect of "race" rather than the culturally embedded meaning of "race."

2.1.2 Spokesperson expertise

Expert sources are considered as more credible compared to non-expert sources. A spokesperson's expertise refers to the perceived ability of a source to make valid assertions about

the issue at hand (Hovland, Janis, & Kelley, 1953; McCracken, 1989). Expertise is determined by whether or not the spokesperson appears to have the relevant knowledge to support her arguments (Ohanian, 1991). Perceived source expertise exists in the form of knowledge, education, intelligence, social status and professional achievement (Yoon, Kim & Kim, 1998). Source expertise is considered as one dimension of perceived source credibility, together with trustworthiness and attractiveness. Perceived source credibility is defined as “judgments made by a perceiver ... concerning the believability of a communicator” (O’Keefe, 1990, p.181). Source credibility is conceptualized as a “weight” that can enhance the value of information in a message (Anderson, 1971). According to Ohanian’s (1991) research about a celebrity endorser’s impact on audience’s purchase intentions, perceived expertise of the celebrity was the only significant factor that influenced audience’s perceived credibility of the source. In Farr’s (2007) study about the effect of race and expertise on source credibility ratings while reviewing resumes, an applicant’s expertise is also significantly correlated with credibility ratings.

Expert sources can lead to greater positive attitudes and behavior intentions. A highly credible source is considered as more effective than a less credible source in changing attitudes and behavioral intentions (Gotlieb & Sarel, 1991; Homer & Kahle, 1990; Ward & McGinnies, 1974; Woodside & Davenport, 1974). Credible sources are considered as associated with favorable outcomes, thus they can increase persuasion (Heesacker, Petty, & Cacioppo, 1983). Ohanian’s (1991) study demonstrated that high perceived credibility of the celebrity endorsers led to greater purchase intentions, no matter if the product was purchased for personal use or for gift giving. Kareklas, Muehling and Weber’s (2015) research about comments of pro- and anti-vaccination online public service announcements demonstrated that an online commenter who was identified as a medical doctor was perceived to be more credible than an online commenter

who was either a lobbyist or a student. Also, credible online commenters were more likely to influence consumers' attitudes and behavioral intentions towards taking vaccinations (Kareklas, et al., 2015). In addition, expert interventionists in HIV prevention produced greater behavioral changes compared to lay community members (Durantini, Albarracin, Mitchell, Earl & Gillette, 2006). Expert sources are more effective in eliciting audience's attitudes and behavioral intentions, therefore, increase persuasion.

2.1.3 Spokesperson race as expertise

In terms of culturally relevant issues, spokesperson race can serve as a form of expertise. Wang and Arpan (2008) studied the effects of using HIV PSAs from a spokesperson who either matched or did not match a participant's race. They found that Black American participants responded more favorably to black spokespersons. HIV has disproportionately affected minority populations, especially Black Americans (CDC, 2006), and Black Americans have accounted for about 40% of diagnosed HIV cases in the United States since 2004 (UNAIDS, 2004). The issues relevant to HIV and HIV prevention are clearly culturally relevant. Thus, a Black spokesperson's race also serves as an expertise cue indicating that they truly understand what risks that their Black American peers may suffer from. Such risks involve poverty, substance abuse and the sexually transmitted disease connection.

The ideal body image is also a culturally constructed term. People from different races have different interpretation of ideal body image. Thus, spokesperson race plays an important role as source when addressing issues related to body image and weight control. Research demonstrated that White and Black females' perceived ideal body size and social norm differed significantly (Kemper, Sargent, Drane, Valois, & Hussey, 1994). Results indicated that the ideal

body figure chosen by Black adolescents was significantly larger than the one chosen by their White peers. Black participants and White participants also differed significantly on the body size that they selected as the representation of social norm; Blacks selected a larger figure than Whites. These two groups of subjects also differed in terms of social expectations of their size and weight. White participants perceived that their parents wanted them to be smaller than they were and their significant others wanted them to be lighter; while Black participants perceived that their parents thought their current size was fine or could be a little bit larger and their significant others also thought their weight did not need to be changed.

Spokesperson race can be an indicator of expertise in culturally relevant context, such as weight control. Seeing a spokesperson from one's same race talking about losing weight could add credibility to the source due to genetic relevance and similar cultural expectations. Asian Americans, as a minority group in the United States, face unique challenges in terms of evaluating their body image and seeking tailored health counseling related to weight control (Javier & Belgrave, 2015). Thus, it is meaningful to test their reactions' to weight loss videos, which feature people from their race and other races.

2.2 Recipient's characteristics

2.2.1 Audience's ethnic identity

An audience's ethnic identity, rather than simple classification based on race, is a more powerful predictor of responses to messages (Deshpande, Hoyer, & Donthu, 1986). The term "race" concerns about how an individual is responded to by others on the basis of superficial visual features, such as skin tone and facial features (Phinney, 1996). However, the term "ethnicity" connotes more psychological importance and cultural characteristics. The term

“ethnicity” is used to refer to broad groupings of Americans on the basis of both race and culture of origin (Phinney, 1996). Ethnic identity refers to “an enduring, fundamental aspect of the self that includes a sense of membership in an ethnic group and the attitudes and feelings associated with that membership” (Phinney, 1996, p. 919). According to Berry (1990), ethnic identity is a component of acculturation related to how members of an ethnic group relate to the group as a subset of society. Ethnic identity does not simply refer to ethnic group membership or label; it is a complex and multidimensional construct that involves cultural characteristics.

Strong ethnic identifiers in minority groups tend to seek racially congruent sources for information. According to Kelman (1961), people automatically evaluate and make judgments about message sources based on similarity to themselves and tend to turn to sources that they identify with the most. Wang and Arpan’s (2008) research showed that Asian American consumers with high ethnic identity preferred advertisements with spokespersons of their same race over spokespersons of other races (e.g., White Americans).

Strong ethnic identifiers in minority groups are more likely to be influenced by the race of the source. Whittler’s (1991) findings indicated that viewers with high ethnic identity were more likely to be affected by source characteristics (e.g., speaker’s race) than viewers with low ethnic identity. People with high ethnic identity are more likely to react positively to a spokesperson of the same ethnic background and react negatively to a spokesperson of a different ethnic background (Bresnahan, Ohashi, Nebashi & Kim, 2001). Green’s (1999) research about strength of ethnic identity and media placement demonstrated that audience’s attitudes towards advertisements depended largely on their degree of identification with their ethnicity groups. For Black American audiences, strong ethnic identifiers tended to prefer Black models and reported greater positive attitudes towards the ads that featured these models. Strong

ethnic identifiers concern more about the racial congruency between them and the source, are more likely to respond favorably to spokesperson of their same race.

3. Theory of Planned Behavior

The Theory of Planned Behavior (TPB) is one of the most influential conceptual frameworks to predict human behaviors (Ajzen, 2001). The TPB states that behavioral intentions are derived from three factors: attitude towards the behavior, subjective norm, and perceived behavioral control (Ajzen, 2002). Attitude is about the individual positive or negative evaluations of performing an action. Subject norm refers to an individual's perception of what she is expected to do in that situation. Perceived behavioral control refers to the perceived ease or difficulty in performing the behavior (Ajzen, 1991).

Attitude towards the behavior is a factor that affects behavior. According to Ajzen (1991), instrumental beliefs of attitude refer to the benefits and costs of a behavior, while affective beliefs of attitude refer to the emotions related to the consequences of the behavior. Prior literature demonstrated that attitude towards the behavior predicted behavioral intentions towards weight loss. For example, attitude towards dieting is a significant predictor of dieting intentions (Lwin, Stanaland, & Williams, 2013).

Subjective norm is another factor that affects behavior. Subjective norm refers to "the perceived social pressure to perform or not to perform the behavior." (Ajzen, 1991, p.188). Body image is a subjective concept of one's physical appearance (Martin, 2010). In modern society, the subjective norm of female body image is the thin ideal body image, which connotes "you can never be too thin" (Martin, 2010). Media portrays also reinforce this subjective norm of ideal body image.

Perceived behavioral control can affect behavior by its impact on intention. The TPB is derived from the Theory of Reasoned Action (Fishbein & Ajzen, 1975), which postulated that most human social behavior is under volitional control and can be predicted from intentions alone (Ajzen, 2002). However, not all of human behavior is under completely volitional control. For example, whether an individual can lose weight successfully depends on both her own determination and objective condition. If she is highly motivated to exercise but could not accommodate gym's opening hours, she still cannot get enough exercise. Therefore, perceived behavioral control was introduced into the TPB to accommodate the unforeseen obstacles and non-volitional elements in behaviors. A high level of perceived behavioral control will strengthen a person's intention to perform the behavior (Ajzen, 2002). Perceived behavioral control is comprised of two components: self-efficacy and controllability (Ajzen, 2002). Self-efficacy refers to the confidence one has to perform a behavior. Controllability refers to the extent to which performance is up to the actor. Self-efficacy and controllability both reflect beliefs about the presence of internal as well as external factors.

The Theory of Planned Behavior has been widely applied to health-related research (Conner & Sparks, 1996). According to Hagger, Chatzisarantis, and Biddle's (2002) review of 72 independent studies about physical activity using the TPB, attitude towards the behavior was the strongest predictor of physical activity. McEachan, Conner, & Lawton's (2005) study demonstrated that perceived behavior control was the strongest predictor of behavioral intention towards exercising. The TPB has also been applied to research about dietary behaviors. McEachan et al. (2005) used TPB to examine healthy eating, reducing fat intake and restricting sugar intake, and concluded that attitude towards dieting was the strongest predictor of behavioral intention towards dieting.

4. Social cognitive theory and self-efficacy

Social cognitive theory explains how people acquire and maintain certain behavioral patterns. An individual's behavior is determined by the interaction of the characteristics of the person, the environment and the behavior itself. People are not passively shaped and influenced by inner forces and environmental elements, instead they are active and self-regulating. An individual is capable of learning from observation, utilizing self-regulation techniques and anticipating outcomes of behavior (Bandura, 1986).

Self-efficacy is a key concept in social cognitive theory. Perceived self-efficacy refers to “the beliefs in one's capabilities to organize and execute the courses of action required to produce given levels of attainments” (Bandura, 1998, p. 624). Self-efficacy perceptions determine whether one will try to initiate a behavioral change and the degree to which one will persist in a behavioral change in the face of difficulties (Bandura, 1977). According to Bandura (1997), exercise of control requires skills and a strong sense of efficacy of using these skills effectively and consistently even when encountering difficulties and obstacles.

Vicarious experience is a major source of self-efficacy, together with past performance, verbal persuasion and emotional cues (Bandura, 1997). Vicarious experience refers to the observation of other people's behavior. According to Bandura (1998), seeing people similar to oneself succeed by sustained effort raises an observer's beliefs that she also possesses the capabilities to master that activity. Vicarious experience is most effective when an individual sees herself as similar to the person she is modeling (Lunenborg, 2011). Lunenborg (2011) claims that if your co-worker loses weight successfully, you will become more confident in

losing weight as well. Thus, social learning can be achieved vicariously by observing other people's actions and its consequences for them.

4.1 Self-efficacy and weight control

Self-efficacy in exercising is an important determinant of exercising behavior. Self-efficacy in exercising refers to the beliefs in one's abilities to engage in exercise self-regulation. It consists of the abilities to overcome barriers to exercise, schedule regular exercise sessions and cope with daily impediments to exercise (Buckley & Cameron, 2010). High self-efficacy in exercising was associated with greater exercise frequency and high levels of physical activities (Anderson, Wojcik, Winett, & Williams, 2006). Women who had high self-efficacy in exercising perceived fewer barriers in doing physical activities and were more likely to enjoy exercising (Dishman, 2005). McAuley and Blissmer (2000) also suggested a reciprocal relationship between physical activity and self-efficacy. That is, self-efficacy functioned as a determinant of physical exercises adoption, maintenance and post-program follow-up. At the same time, self-efficacy was also one of the outcomes of physical activities.

Studies have suggested that self-efficacy in dieting is related to dieting outcomes. Self-efficacy in dieting is defined as "beliefs in one's ability to remain on one's diet in particular eating situations, to adhere to specific dieting behaviors and to achieve dieting goals" (Stotland & Zuroff, 1991, p 48). People with high self-efficacy in dieting were found to be more likely to adhere to their diets during weight loss programs (Fuhrmann & Kuhl, 1998). Dieting self-efficacy was found to have great impact on both short-term and long-term weight loss processes (Stotland, 1989). Choo and Kang's (2014) study revealed that self-efficacy in dieting

significantly predicted both health-promoting behaviors and weight loss. Self-efficacy also moderated the relationship between health-promoting behaviors and weight loss.

People with high self-efficacy in weight control are more likely to successfully lose weight. Self-efficacy in weight control refers to the beliefs in one's abilities to control weight through weight-control strategies, such as exercising and reducing calorie intake. Self-efficacy influenced an individual's decision to employ self-regulatory strategies to manage weight (Kitsantas, 2000). Additionally, people who reported high self-efficacy were more likely to persist longer in the face of difficulties and exhibited more effort in losing weight (Kitsantas, 2000). According to Kitsantas's (2000) study about undergraduate college students' weight management, participants who reported high self-efficacy in carrying out weight-control strategies and applied these strategies persistently were more likely to successfully lose weight. Women with high self-efficacy in losing weight tended to lose more weight than those with low self-efficacy in losing weight (Dennis & Goldberg, 1996, Choo & Kang, 2014). Therefore, self-efficacy in weight control should be considered when predicting people's behavioral intentions towards losing weight.

5. Web 2.0 for health promotion

Web 2.0 technologies have been widely used for health promotion purposes. According to Chou, Prestin, Lyons, and Wen (2013), Web 2.0 media challenged the traditional health promotion models due to its interactive and participatory nature. People seek information and also contribute knowledge to social media sites like Facebook, YouTube, and online forums. For example, the online community PatientsLikeMe helps people to connect with others with the same illness and share information about treatment options (Chou, et al., 2013). Roni Noone, a

web technology professor, who has successfully lost weight, created an online fitness community entitled BlogToLose.com, where she used her experience to help people. It is an online forum where people can search healthy recipes and exercises tips, and offer support to each other. It is also a place where people can express dieting frustrations and share their pleasure of successful weight loss (EmpowHer, 2012). For example, one can create her own page on this website and connect to people experiencing similar happiness and frustrations during her weight loss journey.

Vlog as a form of Web 2.0, has many advantages in regards of conveying health promotion messages. Vlogs are able to enable stronger social support both informationally and emotionally between vloggers and audience (Huh, Lin, Neogi, Inkpen, & Pratt, 2014). Social support seeking is the effort put forth in order to acquire help from others (Kitsantas, 2000). In terms of weight control, social assistance seeking could refer to seeking out people who are also trying to exercise and diet in order to lose weight or people who have already successfully lost weight through a series of weight-control strategies. LaKeisha's online video functions as a form of social support for her followers. Instead of offering social support in person, LaKeisha inspires and motivates her followers via the interactive media environment. Increasing people turn to Web 2.0 platforms to seek such assistance and support. Thus, it is meaningful to investigate how people perceive the vlogger and the message conveyed by the vlogger. This study examines the spokesperson effect of race and expertise on audience's perceived credibility, self-efficacy and behavioral intentions towards weight loss in the interactive media environment.

6. Current Research

According to Appiah (2001), Whittler (1991), and Whittler and DiMeo (1999), audience members tend to favor spokespersons from their same race, and report greater behavioral intentions after watching a racially congruent spokesperson. Therefore, I propose ...

H1: There will be a main effect of racial congruency.

H1a: Participants who watch a racially congruent vlogger will report greater perceived message and source credibility compared to those who watch a racially incongruent vlogger.

H1b: Participants who watch a racially congruent vlogger will report greater self-efficacy towards dieting and exercise compared to those who watch a racially incongruent vlogger.

H1c: Participants who watch a racially congruent vlogger will report greater behavioral intentions towards dieting and exercise compared to those who watch a racially incongruent vlogger.

In addition, audience members from minority groups favor spokespersons of their same race (Appiah, 2004; Kelman, 1961; Wang & Arpan, 2008), and are more likely to be influenced by spokespersons of their same race (Whittler, 1991). Therefore, I propose ...

H2: There will be a significant interaction between participant race and race congruency.

H2a: The interaction between participant race and race congruency will predict perceived message and source credibility, such that, Asian American participants will report greater perceived message and source credibility when watching a racially congruent spokesperson, while White American participants will report a non-significant increase in perceived message and source credibility when watching a racially congruent spokesperson.

H2b: The interaction between participant race and race congruency will predict self-efficacy towards exercising and dieting, such that, Asian American participants will report greater self-efficacy towards exercising and dieting when watching a racially congruent spokesperson, while White American participants will report a non-significant increase in self-efficacy towards exercising and dieting when watching a racially congruent spokesperson.

H2c: The interaction between participant race and race congruency will predict behavioral intentions towards exercising and dieting, such that, Asian American participants will report greater behavioral intentions towards exercising and dieting when watching a racially congruent spokesperson, while White American participants will report a non-significant increase in behavioral intentions towards exercising and dieting when watching a racially congruent spokesperson.

In addition, strong ethnic identifiers in minority groups are more likely to be influenced by source race (Bresnahan et al., 2001; Green, 1999; Whittler, 1991), while weak ethnic identifiers in majority groups tend to be more open to other cultures and messages conveyed by spokespersons from other races (Appiah, 2002). Therefore, I propose ...

H3: There will be a significant three-way interaction between race congruency, participant race and participant ethnic identity.

H3a: The three-way interaction will predict perceived message and source credibility, such that, Asian American participants with high ethnic identity will report greater perceived message and source credibility when watching a racially congruent spokesperson, while Asian American participants with low ethnic identity will report a non-significant increase in perceived message

and source credibility when watching a racially congruent spokesperson. White American participants with low ethnic identity will report greater perceived message and source credibility when watching a racially congruent spokesperson, while White American participants with high ethnic identity will report a non-significant increase in perceived message and source credibility when watching a racially congruent spokesperson.

H3b: The three-way interaction will predict perceived message and source credibility, such that, Asian American participants with high ethnic identity will report greater self-efficacy towards exercising and dieting when watching a racially congruent spokesperson, while Asian American participants with low ethnic identity will report a non-significant increase in self-efficacy towards exercising and dieting when watching a racially congruent spokesperson. White American participants with low ethnic identity will report greater self-efficacy towards exercising and dieting when watching a racially congruent spokesperson, while White American participants with high ethnic identity will report a non-significant increase in self-efficacy towards exercising and dieting when watching a racially congruent spokesperson.

H3c: The three-way interaction will predict perceived message and source credibility, such that, Asian American participants with high ethnic identity will report greater self-efficacy towards exercising and dieting when watching a racially congruent spokesperson, while Asian American participants with low ethnic identity will report a non-significant increase in self-efficacy towards exercising and dieting when watching a racially congruent spokesperson. White American participants with low ethnic identity will report greater self-efficacy towards exercising and dieting when watching a racially congruent spokesperson, while White American participants with high ethnic identity will report a non-significant increase in self-efficacy towards exercising and dieting when watching a racially congruent spokesperson.

Furthermore, expert sources are considered as more credible compared to non-expert sources (Farr, 2007; Ohanian, 1991), and can lead to greater positive attitudes and behavioral intentions (Gotlieb & Sarel, 1991; Homer & Kahle, 1990; Ward & McGinnies, 1974; Woodside & Davenport, 1974). Therefore, I propose ...

H4: There will be a significant interaction between vlogger expertise and race congruency.

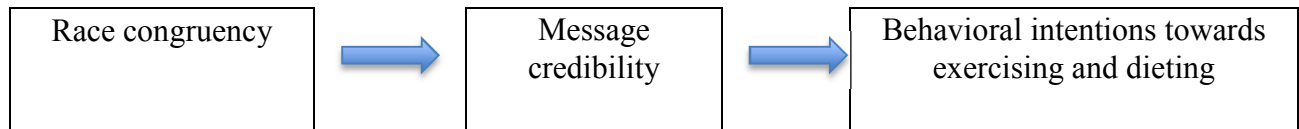
H4a: The interaction between vlogger expertise and race congruency will significantly predict perceived message and source credibility, such that, participants will report greater perceived message and source credibility when watching a racially congruent health vlogger, while participants will report a non-significant increase in perceived message and source credibility when watching a racially congruent fashion vlogger.

H4b: The interaction between vlogger expertise and race congruency will significantly predict self-efficacy towards exercising and dieting, such that, participants will report greater self-efficacy towards exercising and dieting when watching a racially congruent health vlogger, while participants will report a non-significant increase in self-efficacy towards exercising and dieting when watching a racially congruent fashion vlogger.

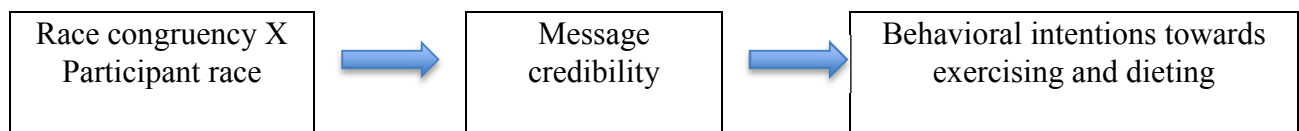
H4c: The interaction between vlogger expertise and racial congruency will significantly predict behavioral intentions towards exercising and dieting, such that, participants will report greater behavioral intentions towards exercising and dieting when watching a racially congruent health vlogger, while participants will report a non-significant increase in behavioral intentions towards exercising and dieting when watching a racially congruent fashion vlogger.

Past research demonstrate that audience members perceive message conveyed by spokesperson from their same race as more credible (Appiah, 2001; Whittler, 1991), and credible messages are more likely to lead to greater behavioral changes (Gotlieb & Sarel, 1991; Homer & Kahle, 1990). Therefore, I propose ...

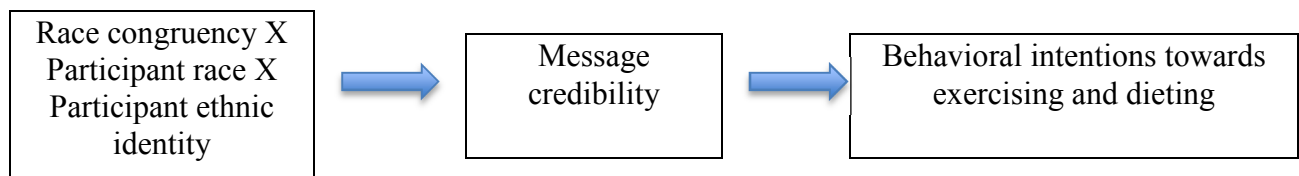
H5: Message credibility will mediate the relationship between race congruency and behavioral intentions towards exercising and dieting.



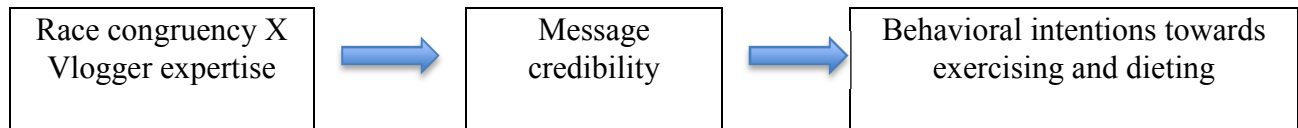
H6 Message credibility will mediate the relationship between the interaction of race congruency and participant race, and behavioral intentions towards exercising and dieting.



H7: Message credibility will mediate the relationship between the interaction of race congruency, participant race and ethnic identity, and behavioral intentions towards exercising and dieting.

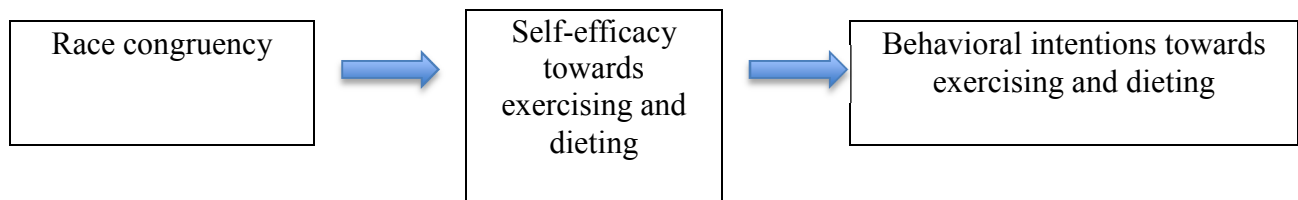


H8: Message credibility will mediate the relationship between the interaction of race congruency and vlogger expertise, and behavioral intentions towards exercising and dieting.

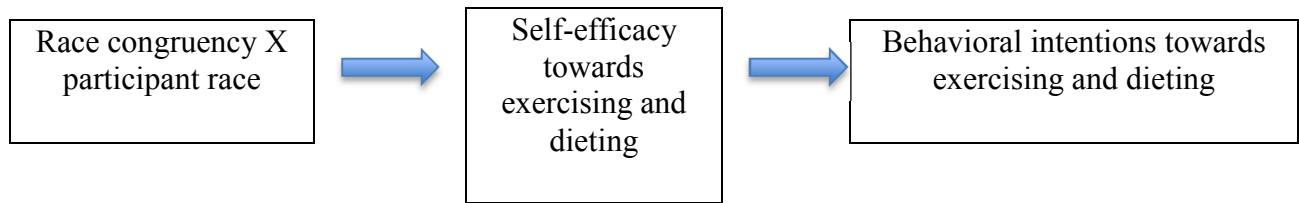


Prior literature demonstrates that audience members are more likely to be persuaded by messages conveyed by racially congruent spokespersons (Appiah, 2001; Whittler, 1991). Audience members report more self-efficacy after watching a racially congruent spokesperson compared to a racially incongruent spokesperson (Lunenburg, 2011), and people with high self-efficacy in weight control are more likely to successfully lose weight (Choo & Kang, 2014; Dennis & Goldberg, 1996; Kitsantas, 2000).

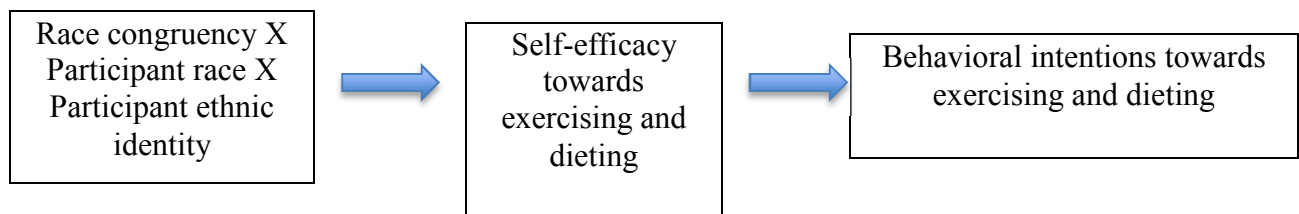
H9: Self-efficacy towards exercising and dieting will mediate the relationship between race congruency and behavioral intentions towards exercising and dieting.



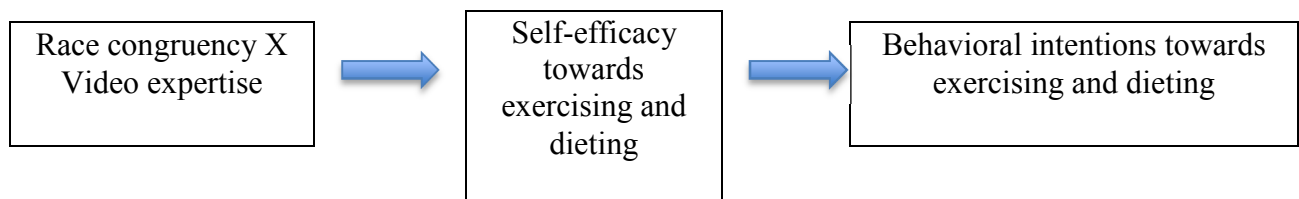
H10: Self-efficacy towards exercising and dieting will mediate the relationship between the interaction of race congruency and participant race, and behavioral intentions towards exercising and dieting.



H11: Self-efficacy towards exercising and dieting will mediate the relationship between the interaction of race congruency, participant race and ethnic identity, and behavioral intentions towards exercising and dieting.



H12 Self-efficacy towards exercising and dieting will mediate the relationship between the interaction of race congruency and video expertise, and behavioral intentions towards exercising and dieting.



Chapter 3: Methodology

This study tested the hypothesis through a cross-sectional, between-subject, posttest-only experimental design. The experiment used a 2 (vlogger race: White American versus Asian American) X 2 (vlogger expertise: fashion vlogger versus health vlogger) design. Spokesperson's race and expertise were experimentally manipulated and, for each of the four conditions, one video with one spokesperson was created. The experiment was launched online through Amazon Mechanical Turk.

1. Stimuli

The experiment stimulus was a weight loss video, in which a female vlogger was talking about how she lost weight successfully. There were eight videos in total, casting four female spokespersons (two White Americans and two Asian Americans), and these four videos were each edited into two versions (health vlog and fashion vlog) (see Appendix A-1).

1.1 Pretest

A pretest guided the selection of spokespersons. Ten female students were recruited from Syracuse University for the pretest. They are all females aged 18-30, were born in the United States and are currently living in the United States but from different racial groups (five White American, four Asian American, one multi-racial). All of them were English native speakers.

For the pretest, 50 female participants aged 18-30, self-categorized as White American or Asian American, were born in the United States and are currently living in the United States, were recruited online through MTurk. After reading the consent form and providing demographic information, participants saw, in random order, all 10 women. Participants were

first asked if they personally knew the woman in the picture. If the answer was “no,” participants were then asked to rate this person’s attractiveness on a scale from 1 to 10. Participants were then asked to type in the perceived age and choose the gender and race of the person in the picture. The questionnaire took participants less than five minutes to complete. When completed, participants were thanked and reimbursed \$.05 for their time.

Subjects’ scores in age, gender, race and attractiveness were analyzed through SPSS Statistics and Microsoft Excel. The four selected spokespersons need to be similar on age, gender, and attractiveness but distinct racially, each of them need to be identified as either White or Asian American clearly. Each subject’s score in race was analyzed after splitting the file by participants’ ethnicity. That is, for each person, her perceived race by both White participants and Asian participants were examined. The two selected White American actresses were each perceived by 96% and 88% of White participants as “White” (the other three White American actresses’ scores were 87.5%, 80.8% and 79.2%), and the two selected Asian American actresses were each perceived by 84.6% and 75% of Asian participants as “Asian” (the other two Asian American actresses’ scores were 64.3% and 61.5%). Their perceived ages were 25.21, 26.03, 22.74 and 25.5 (see Table 3.1).

1.2 Video production

For video production, each actress was provided with a script developed by the researcher (see Appendix A-2). The researcher investigated popular weight loss videos on YouTube for the most popular weight loss tips, which included exercising, reducing calorie intake, and drinking water. These aspects were included in order to give explicit instructions that people could follow. In the video, each actress delivered the script to the camera similar to a vlogger. They all had

ponytail hairstyle and wore white tops in the videos to reduce effects caused by their differences in appearance. Finally, one video was shot with each of them. The total four videos were then each edited into two versions (a fashion vlog and a health vlog). In order to make this “expertise” cue salient enough for an audience to remember, captions of “fashion vlog” and “health vlog” were edited into the opening of the videos, as well as subtitles and endings of the videos for reinforcement. Each video is about two minutes long.

2. Participants and procedure

Participants were recruited via Amazon Mechanical Turk, a crowdsourcing Internet marketplace that allows people to post and complete tasks. MTurk is popular because of its ease-of-use and relatively short time to complete. According to Ipeirotis (2015), the gender participation is balanced on MTurk, with roughly 50% males and 50% females. Approximately 80% of MTurk workers are from the U.S. and 20% are from India. The majority of MTurk workers self identify as White (73.38%), while 12.69% of the participants self identify as Black, 2.61% self identify as Hispanic and 1.5% self identify as Asian (Huff & Tingley, 2015).

Eligible participants were females aged from 18 to 30, self-categorized as White American or Asian American (East Asian), were born in the United States and are currently living in the United States. All the participants were English native speakers. A total number of 174 responses were collected for the online experiment. A total number of 98 valid responses were selected for data analysis in terms of correct spokesperson face confirmation and reasonable time with the video. The stimulus video was about 108 seconds long, and eligible time with the video ranged from 95 seconds (when the spokesperson finishing addressing the last weight loss tip) to 150 seconds.

In the online experiment, participants first read the consent form and provided demographic information, before responding to a brief questionnaire about their exercising and dieting history. Participants were then randomly assigned a video that featured a young woman talking about her experiences of losing weight. After watching the video, participants responded to questions regarding attitudes towards exercising, dieting, and drinking water, behavioral intentions towards exercising, dieting, and drinking water, self-efficacy towards exercising, dieting, and drinking water, perceived credibility of the source and the message, and ethnic identification. The experiment took participants approximately ten minutes to complete. When completed, participants were thanked and reimbursed \$1 for their time.

3. Measures

3.1 Prior behavior of exercising and dieting

Gilliam's (2014) stages of change assessment form was adopted to measure participant's prior behavior of exercising and dieting (see Appendix B-1). There were five statements about exercise (e.g., I currently exercise but not on a regular basis), and five statements about food choices (e.g., I currently make good food choices regularly but I have only begun to do so in the last six months). Participants were asked to circle the box beside the statement that best describes where they were in terms of exercise and food choices.

3.2 Attitude towards exercising

Attitude towards exercising is operationalized as a participant's tendency to respond positively or negatively towards the idea of exercising. Semantic differential rating scales with bipolar adjectives are typically employed for the direct measure of attitudes (Haggers et al.,

2006). Lowe, Eves, and Carroll's (2002) scale was adopted to measure attitude towards exercising (see Appendix B-2). This scale was developed based on the affective and instrumental attitude scales used by Conner and Sparks (1996), Godin (1987), and Godin and Shephard (1986). In this study, participants were asked the question "exercising in my leisure time over the next six months would be ..." followed by four items composed of adjectives, including "extremely boring/extremely interesting", "extremely unenjoyable/extremely enjoyable", "extremely harmful/extremely beneficial" and "extremely unhealthy/extremely healthy." These four items measured the affective and instrumental aspects of attitudes towards exercising. Each item was measured on a seven-point bipolar scale. The items in this scale did not achieve sufficient internal consistency (Cronbach's $\alpha = .65$), therefore, this scale was dropped from further data analysis.

3.3 Attitude towards dieting

Attitude towards dieting is operationalized as a participant's tendency to respond positively or negatively towards the idea of dieting. Lwin, Stanaland and Williams' (2013) method to measure participants' attitudes towards dieting was adopted. Lwin, et al. (2013) adjusted Lowe, et al.'s (2002) seven-point bipolar adjective scale to measure people's dieting attitudes and have established scale reliability (see Appendix B-3). Participants were asked the question "dieting over the next six months would be..." preceded the adjectives of "extremely boring/extremely interesting," "extremely unenjoyable/extremely enjoyable," "extremely harmful/extremely beneficial" and "extremely unhealthy/extremely healthy." Each item was measured on a seven-point bipolar scale. The items in this scale did not achieve sufficient

internal consistency (Cronbach's $\alpha = .56$), therefore, this scale was dropped from further data analysis.

3.4 Attitude towards drinking water

Attitudes towards drinking water are operationalized as a participant's tendency to respond positively or negatively towards the idea of drinking water. Lowe, et al.'s scale was adopted to measure attitudes towards drinking water (see Appendix B-4). Participants were asked the question "drinking water over the next six months would be..." followed by the adjectives of "extremely boring/extremely interesting," "extremely unenjoyable/extremely enjoyable," "extremely harmful/extremely beneficial" and "extremely unhealthy/extremely healthy." Each item was measured on a seven-point bipolar scale. The items in this scale did not achieve sufficient internal consistency (Cronbach's $\alpha = .50$), therefore, this scale was dropped from further data analysis.

3.5 Behavioral intention towards exercising

Behavioral intention towards exercising is operationalized as a person's perceived likelihood that she will engage in exercising. According to Conner and Sparks (1996), behavioral intention measures tend to use a number of standard wordings that incorporate the same level of specificity with respect to action, target, context and time frame as used in the behavioral measure. From a psychometric point of view, multiple-item measurements are more appropriate than single-item measures because of increased reliability (Conner & Sparks, 1996). Ziegelmann, Luszczynska, Lippke and Schearzer's (2007) scale was adopted to measure behavioral intention towards exercising (see Appendix B-5). This six-item scale measured behavioral intentions

towards exercising from two aspects: goal intentions and implementation intentions to perform physical activities. Participants were asked to rate these items on a four-point scale ranging from “not at all true,” “not true,” “a little true,” to “absolutely true.” Sample statements included “I intend to exercise as part of my daily routine” and “I have already planned precisely where to exercise.” This scale was reliable (Cronbach’s $\alpha = .78$).

3.6 Behavioral intention towards dieting

Behavioral intention towards dieting is operationalized as a person’s perceived likelihood that he/she will engage in dieting. Cruwys, Platow, Rieger, and Byrne’s (2013) Dieting Intentions Scale (DIS) was adopted to measure dieting intentions (see Appendix B-6).

Participants were first asked to rate two statements on a seven-point Likert scale, ranging from “strongly disagree” to “strongly agree.” These two items were “In the next three months, I intend to go on a diet,” and “In the next three months, I intend to reduce my calorie intake.” Then, participants rated the statement “if I diet in the next three months, this would be ...” with five groups of adjectives including, “harmful/beneficial,” “unpleasant/pleasant,” “useless/useful,” “foolish/wise” and “bad/good” on a bipolar scale. Only the first two items were used for data analysis, and they achieved sufficient internal consistency (Cronbach’s $\alpha = .92$). The five-item measure was lack of face validity.

3.7 Behavioral intention towards drinking water

Behavioral intention towards drinking water is operationalized as a person’s perceived likelihood that he/she will engage in drinking water. Cruwys, et al.’s (2013) Dieting Intentions Scale (DIS) was adjusted to measure behavioral intentions towards drinking water (see Appendix

B-7). Participants were first asked to rate the statement “in the next three months, I intend to drink more water.” This statement was asked to be rated on a seven-point Likert scale, ranging from “strongly disagree” to “strongly agree.” Participants also rated the statement “if I drink more water in the next three months, this would be...” with five groups of adjectives mentioned above on a bipolar scale. As the five-item measure was lack of face validity, only the first single item could be used. It was dropped due to unreliability.

3.8 Self-efficacy towards exercising

Sallis, et al.’s (1988) self-efficacy for exercise behaviors scale consisted of two factors, including factor 1) resisting relapse, and factor 2) making time for exercise. Only items in factor 2 were selected to measure self-efficacy in exercising in this study, as the video mainly addressed the importance of persistence in exercising. Participants were asked, “how confident you are that you could really motivate yourself to do things like these consistently, for at least six months?” There were seven items in the scale. Sample items were “get up early, even on weekends, to exercise,” “stick to your exercise program after a long, tiring day at work” and “exercise even though you are feeling depressed” (see Appendix B-8). Each item was rated on a five-point Likert scale ranging from “sure I could not do it” to “sure I could do it.” This scale was reliable (Cronbach’s $\alpha = .84$).

3.9 Self-efficacy in dieting

Sallis, et al.’s (1988) self-efficacy for eating behavior scale was adopted to measure self-efficacy in dieting. The original scale had five factors including resisting relapse, reducing calories, reducing salt, reducing fat and behavioral skills. Only items in factor 2 reducing calories

were selected to measure self-efficacy in dieting in this study, as the video mainly talked about losing weight through reducing calorie intake. Participants were asked, “how confident you are that you could really motivate yourself to do things like these consistently, for at least six months?” There were fifteen items in the scale. Sample items were “eat smaller portions at dinner,” “avoid eating chips, dip and sweets at a party” and “bring lunch from home instead of eating out” (see Appendix B-9). Each item was rated on a five-point Likert scale ranging from “sure I could not do it” to “sure I could do it.” This scale was reliable (Cronbach’s $\alpha = .86$).

3.10 Self-efficacy in drinking water

Self-efficacy in drinking water is operationalized as the confidence one has to drink more water and drink only water in daily life. Baranowski, et al.’s (2010) self-efficacy scale for water intake was adopted for this study. There were three items in the scale. Participants were asked how sure were they that they could drink only water whenever they were thirsty, drink four to six glasses or bottles of water per day and drink four to six glasses or bottles of water per day even when stressed (see Appendix B-10). Answers were recorded on a binary scale consisted of “sure” and “not sure.” This scale was dropped from further data analysis due to insufficient scale reliability (Cronbach’s $\alpha = .64$).

3.11 Source credibility

Berlo, Lemert, and Merz’s (1970) scale was adopted to measure participants’ perceived credibility of the spokesperson in the video (see Appendix B-11). This bipolar scale had five items including “experienced/inexperienced,” “emphatic/hesitant,” “trained/untrained,” “skilled/unskilled” and “active/passive.” Two additional items, “likable/not likable” and

“attractive/not attractive,” were added into this scale. Each item was rated on a seven-point scale. This scale was reliable (Cronbach’s $\alpha = .91$).

3.12 Message credibility

Meyer’s (1988) five-item credibility index was used to measure message credibility (see Appendix B-12). This bipolar scale had five items (“is fair-is unfair,” “is unbiased–is biased,” “tells the whole story-doesn't tell the whole story,” “is accurate-is inaccurate,” “can be trusted-cannot be trusted”). Participants rated these items on a seven-point scale. This scale was reliable (Cronbach’s $\alpha = .88$).

3.13 Ethnic identity

Scottham, Sellers and Nguyen’s (2008) MIBI-t (Multidimensional Inventory of Black Identity-Teen) was adopted to measure participants’ ethnic identity (See Appendix B-13). There were three statements in the scale (“I feel close to other Black people,” “I have a strong sense of belonging to other Black people,” and “If I were to describe myself to someone, one of the first things that I would say is that I'm Black”) and participants rated each statement on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The word that indicating ethnicity was in line with the answer that the participant entered in the demographic question, such that White American participants were presented the statement like “I feel close to other White American people”, and Asian American participants were presented the statement like “I feel close to other Asian American people”. This scale was reliable (Cronbach’s $\alpha = .83$). This scale was also reliable for both White American participants ($\alpha = .79$) and Asian American participants ($\alpha = .84$).

4. Statistical analysis

Data obtained from the online experiment was analyzed by using the quantitative analysis software, SPSS Statistics. T-tests were conducted to test the significance of H1. A series of two-way MANOVA was conducted to test H2 and H4. A series of three-way MANOVA was conducted to test the significance of H3. A series of two-way MANCOVA was conducted to test H5, H6, H8, H9, H10, and H12. A series of three-way MANCOVA was conducted to test the significance of H7 and H11.

Chapter 4: Results

Preliminary results

Among the participants, 51 are White Americans and 47 are Asian Americans. 50 participants watched the videos featuring White vloggers, and 48 participants watched the videos featuring Asian vloggers. 48 participants watched the fashion vlogs, while 50 participants watched the health vlogs (see Table 4.1).

Before conducting data analysis, each variable's distribution was examined. Behavioral intention towards exercising exhibited a moderate negative skewness and was subjected to a square root transformation. Behavioral intention towards dieting exhibited a substantial negative skewness and was subjected to a logarithmic transformation. Self-efficacy towards exercising exhibited a substantial negative skewness and was subjected to a logarithmic transformation. Self-efficacy towards dieting exhibited a moderate negative skewness and was subjected to a square root transformation. Transformed data was used for further data analysis and result reporting.

Descriptive statistics for variables are presented in table 4.2. The mean for participants' age was 25.61 ($M = 25.61, SD = 3.18$), and White American participants were significantly older than Asian American participants, $t(96) = 1.99, p = .05$. The mean for behavioral intention towards exercising was .59 ($M = .59, SD = .22$), and the mean for behavioral intention towards dieting was .44 ($M = .44, SD = .21$). Asian American participants reported marginally significantly greater behavioral intention towards dieting compared to White American participants, $t(96) = -1.83, p = .071$. The mean for self-efficacy towards exercising was .36 ($M = .36, SD = .15$), and the mean for self-efficacy towards dieting was .70 ($M = .70, SD = .22$). In terms of perceived credibility variables, the mean for perceived source credibility was 4.19 ($M =$

4.19, $SD = 1.19$), and the mean for perceived message credibility was 4.33 ($M = 4.33$, $SD = 1.23$). The mean for ethnic identity was 3.36 ($M = 3.36$, $SD = 1.04$). Asian American participants reported significantly stronger ethnic identity compared to White American participants, $t(96) = -5.77$, $p < .001$.

Before testing hypotheses, correlations between variables were examined (see Table 4.3). Results demonstrated that behavioral intention towards exercising and dieting were positively correlated ($r = .25$, $p = .012$). Self-efficacy towards exercising and dieting were positively correlated ($r = .61$, $p < .001$). Perceived source credibility and message credibility were also positively correlated ($r = .57$, $p < .001$). There was a positive correlation between behavioral intention towards exercising and self-efficacy towards exercising ($r = .56$, $p < .001$), and between behavioral intention towards dieting and self-efficacy towards dieting ($r = .49$, $p < .001$). Ethnic identification was positively correlated with behavioral intention towards exercising ($r = .21$, $p = .039$) and dieting ($r = .37$, $p < .001$), self-efficacy towards exercising ($r = .33$, $p = .001$) and dieting ($r = .39$, $p < .001$), and perceived source credibility ($r = .21$, $p = .036$).

Among the 112 participants who spent reasonable time with the video, 98 of them correctly confirmed the vlogger face they saw in the video. Participants with correct face confirmation were selected for further data analysis. In terms of vlogger expertise, all 50 participants who watched a health video correctly confirmed that they watched a health video. However, only 11 participants who watched a fashion video correctly confirmed that they watched a fashion video, and the other 37 participants perceived they watched a health video. In this sense, the manipulation of vlogger expertise did not work in this study, and correct vlogger expertise confirmation was not used as a criterion to select valid responses.

Participant's total click count on the video was analyzed before further data analysis. Each video was uploaded online with actress's real name in the label, even though they were all given the name Angela in the video. However, the label only appears when a participant clicks on the video. In order to check whether the labeling reduces validity of this study, participant's total click count on the video was trichotomized into "no click," "1 click," and "2 and more clicks". One-way ANOVA revealed that there was no significant difference between these three levels of interaction in terms of message and source credibility. Post-hoc analysis revealed that a marginally significant difference on message credibility between participants who did not click on the video and participants who clicked twice and more on the video, $p = .056$. Participants who clicked twice and more reported marginally significantly greater message credibility than participants who did not click on the video at all. Therefore, the label of video did not reduce credibility.

Perceived source credibility of the four vloggers was compared before further data analysis. According to one-way ANOVA, there was no significant difference between the four vloggers in terms of source credibility, $F(3, 94) = .674, p = .57$. Furthermore, there was no significant difference between the four vloggers in terms of individual items of source credibility. Therefore, participants did not rate the Asian American actresses and the White American actresses differently on perceived source credibility.

It is assumed that participants who watched a health vlogger would report greater perceived source and message credibility compared to those who watched a fashion vlogger. A series of independent t-tests were conducted to test the significance of this assumption. Results revealed that there was a main effect of vlogger expertise on perceived message credibility. Participants who watched a health vlogger reported marginally significant greater perceived

message credibility ($M = 4.54$, $SD = 1.11$) than those who watched a fashion vlogger ($M = 4.11$, $SD = 1.32$), $t(96) = -1.75$, $p = .083$. However, there was no significant effect on perceived source credibility, $t(96) = -1.36$, $p = .177$.

Primary results

H1 predicted that participants who watched a racially congruent vlogger would report greater perceived source and message credibility, greater self-efficacy towards exercising and dieting, and greater behavioral intentions towards exercising and dieting compared to those who watched a racially incongruent vlogger. A series of independent t-tests were conducted to test the significance of H1. Results revealed a main effect of race congruency on perceived source credibility. Participants who watched a racially congruent vlogger reported marginally significant greater perceived source credibility compared to those who watched a racially incongruent vlogger, $t(96) = 1.89$, $p = .062$. No significant differences of race congruency were found on perceived message credibility. Therefore, H1a was partially supported. No significant differences of race congruency were found on self-efficacy and behavioral intentions towards exercising and dieting. Thus, H1b and H1c were not supported. Therefore, H1 was partially supported.

H2 predicted that participant race would moderate the effect of race congruency on perceived source and message credibility, self-efficacy towards exercising and dieting, and behavioral intentions towards exercising and dieting. A two-way MANOVA was conducted to test whether the interaction of race congruency and participant race predicts perceived source and message credibility. Results demonstrated that this interaction was not a multivariate predictor of perceived source and message credibility, $F(2, 93) = 2.157$, $p = .121$. However,

between-subject tests revealed that this interaction predicted message credibility, $F(1, 94) = 3.971, p = .049$. Post hoc comparisons revealed that Asian American participants reported significantly greater perceived message credibility after watching a racially congruent vlogger compared to a racially incongruent vlogger, $t(45) = 2.03, p = .048$. Alternatively, race congruency did not have an effect on White American participants' perceived message credibility, $t(49) = -.77, p = .444$. Therefore, H2a was partially supported.

A two-way MANOVA was conducted in order to test whether the interaction of race congruency and participant race predicts self-efficacy towards exercising and dieting. Results demonstrated that this interaction was not a significant multivariate predictor of self-efficacy towards exercising and dieting, $F(2, 93) = .999, p = .272$. This interaction also failed to predict self-efficacy towards exercising and self-efficacy towards dieting individually, according to between-subjects tests. Therefore, H2b was not supported.

Again, a two-way MANOVA was conducted to test whether the interaction between race congruency and participant race predicts behavioral intentions towards exercising and dieting. Results demonstrated that this interaction was a marginal significant multivariate predictor of behavioral intentions towards exercising and dieting, $F(2, 93) = 2.704, p = .072$. Between-subjects tests revealed that this interaction marginally predicted behavioral intention towards exercising, $F(1, 94) = 2.928, p = .09$, and behavioral intention towards dieting, $F(1, 94) = 3.893, p = .051$. Post hoc comparisons revealed that Asian American participants reported greater behavioral intentions towards both exercising and dieting after watching a racially congruent vlogger, while White American participants reported a non-significant increase in behavioral intentions towards exercising and dieting after watching a racially congruent vlogger (see Table 4.4). Thus, H2c was supported. Therefore, H2 was partially supported.

H3 proposed that participant race and ethnic identity would moderate the effect of race congruency on perceived message and source credibility, self-efficacy towards exercising and dieting, and behavioral intentions towards exercising and dieting. Ethnic identity was coded into dichotomous variable in order to be tested in MANOVA. A three-way MANOVA was conducted to test whether the interaction of race congruency, participant race and ethnic identity predicted perceived source and message credibility. Results revealed that this interaction was not a significant multivariate predictor of perceived message and source credibility, $F(2, 89) = .979, p = .38$. Between-subjects tests revealed that this interaction also failed to predict message credibility, $F(1, 90) = 1.561, p = .215$, and source credibility, $F(1, 90) = 1.514, p = .222$, individually. Therefore, H3a was not supported.

A three-way MANOVA was conducted to test whether this interaction predicts self-efficacy towards exercising and dieting. Results revealed that this interaction was a significant multivariate predictor of self-efficacy towards exercising and dieting, $F(2, 89) = 3.309, p = .041$. Between-subject tests revealed that this interaction was a significant predictor of self-efficacy towards exercising, $F(1, 90) = 5.618, p = .02$, and self-efficacy towards dieting, $F(1, 90) = 4.876, p = .03$. Post hoc comparisons revealed that White American participants with low ethnic identity reported marginally greater self-efficacy towards exercising after watching a racially incongruent vlogger compared to a racially congruent vlogger, $t(36) = -1.73, p = .093$. Asian American participants with low ethnic identity reported marginally greater self-efficacy towards exercising $t(9) = 1.93, p = .086$, and greater self-efficacy towards dieting $t(9) = 1.98, p = .079$ after watching a racially congruent vlogger compared to a racially incongruent vlogger. Therefore, H3b was partially supported.

Again, a three-way MANOVA was conducted to test whether this interaction predicted perceived behavioral intentions towards exercising and dieting. Results revealed that this interaction was not a significant multivariate predictor of behavioral intentions towards exercising and dieting, $F(2, 89) = .522, p = .592$. Between-subjects tests revealed that this interaction also failed to predict behavioral intention towards exercising, $F(1, 90) = .038, p = .845$, and behavioral intention towards dieting, $F(1, 90) = .893, p = .347$, individually. Thus, H3c was partially supported. Therefore, H2 was partially supported.

H4 predicted that vlogger expertise would moderate the effect of race congruency on perceived source and message credibility, self-efficacy towards exercising and dieting, and behavioral intentions towards exercising and dieting. A two-way MANOVA was conducted to test whether the interaction of race congruency and vlogger expertise predicted perceived source and message credibility. Results revealed that this interaction was not a significant multivariate predictor of perceived message and source credibility, $F(2, 93) = .567, p = .569$. This interaction also failed to predict message credibility, $F(1, 94) = .907, p = .343$, and source credibility, $F(1, 94) = .015, p = .903$, individually, according to between-subjects tests. Therefore, H4a was not supported.

A two-way MANOVA also demonstrated that this interaction was not a significant multivariate predictor of self-efficacy towards exercising and dieting, $F(2, 93) = .226, p = .798$. Between-subjects tests revealed that this interaction also failed to predict self-efficacy towards exercising, $F(1, 94) = .368, p = .545$, and self-efficacy towards dieting, $F(1, 94) = .023, p = .879$, individually. Therefore, H4b was not supported.

Finally, although a two-way MANOVA revealed that the interaction between race congruency and video expertise was not a multivariate predictor of perceived behavioral

intentions towards exercising and dieting, $F(2, 93) = 2.006, p = .14$, between-subjects tests revealed that this interaction marginally predicted behavioral intention towards exercising, $F(1, 94) = 3.026, p = .085$, but not behavioral intention towards dieting, $F(1, 94) = .269, p = .606$. Post hoc comparisons revealed that participants in racially congruent group reported marginally significantly greater behavioral intention towards exercising after watching a fashion vlogger compared to a health vlogger, $t(43) = 1.83, p = .075$. This result countered H4c. Thus, H4c was not supported and H4 was not supported.

H5 predicted that message credibility would mediate the relationship between race congruency and behavioral intentions towards exercising and dieting. Previous results showed that race congruency failed to predict participants' behavioral intentions towards exercising and dieting, thus, H5 could not be tested. H7 and H8 were not tested for the same reason.

H6 predicted that message credibility would mediate the interaction of race congruency and participant race on behavioral intentions towards exercising and dieting. When message credibility was added to the two-way MANCOVA as a covariate in the model, the interaction of race congruency and participant race no longer predicted behavioral intentions towards exercising and dieting, $F(2, 92) = 1.451, p = .24$. Hence, message credibility mediated the relationship between the interaction of race congruency and participant race on behavioral intentions towards exercising and dieting. Therefore, H6 was supported.

H9 predicted that self-efficacy would mediate the relationship between race congruency and behavioral intentions towards exercising and dieting. Previous results showed that race

congruency failed to predict participants' behavioral intentions towards exercising and dieting, thus, H9 could not be tested. H11 and H12 were not tested for the same reason.

H10 predicted that self-efficacy would mediate the interaction of race congruency and participant race on behavioral intentions towards exercising and dieting. When self-efficacy was added to the two-way MANCOVA as a covariate in the model, the interaction of race congruency and participant race no longer predicted behavioral intentions towards exercising and dieting, $F(2, 91) = 1.872, p = .16$. Hence, self-efficacy mediated the relationship between the interaction of race congruency and participant race on behavioral intentions towards exercising and dieting. Therefore, H10 was supported.

Chapter 5: Discussion

The purpose of this study was to examine the effect of vlogger race and expertise on audience's responses, including perceived source and message credibility, self-efficacy towards exercising and dieting, and behavioral intentions towards exercising and dieting. Results revealed that, although race congruency between vlogger and audience demonstrated limited effect on the outcome variables, it was moderated by participant race, participant ethnic identity, and vlogger expertise. Asian American participants reported greater perceived message credibility, and behavioral intentions towards exercising and dieting after watching an Asian American vlogger compared to a White American vlogger. Asian American participants with low ethnic identity reported greater self-efficacy towards exercising and dieting after watching an Asian American vlogger compared to a White American vlogger. White American participants with low ethnic identity reported greater self-efficacy towards exercising after watching an Asian American vlogger compared to a White American vlogger. In addition, participants in racially congruent group reported greater behavioral intention towards exercising after watching a fashion vlogger compared to a health vlogger. Furthermore, perceived message credibility mediated the effect of the interaction of race congruency and participant race on participant's behavioral intentions towards exercising and dieting. Findings of this study provide insights for understanding spokesperson effect and designing health campaigns in the interactive media environment.

This study confirmed that health vlog resulted in greater perceived message credibility among audience compared to fashion vlog. That is, message conveyed by an expert is perceived as more credible than that conveyed by a non-expert in the interactive media environment. This result is in line with past research that suggests that messages conveyed by expert sources are

considered as more credible (Ohanian, 1991; Farr, 2007). However, vlogger expertise did not affect perceived source credibility. These results demonstrated that vlogger expertise functioned as a central processing cue instead of a peripheral processing cue. According to Dunbar, et al., (2014), credibility can function as a central cue of information processing, if it causes the audience to pay more attention to the message itself compared to the source.

Audiences who watched a racially congruent vlogger reported the vlogger as more credible than a racially incongruent vlogger. This result is in line with past research that has suggested that audience members tend to favor spokespersons from their same race (Appiah, 2001, Whittler, 1991; Whittler & DiMeo, 1999). However, race congruency between vlogger and audience did not have an impact on perceived message credibility. That is, vlogger race served as a peripheral processing cue instead of a central processing cue, and led audiences to the peripheral route of information processing. In addition, race congruency did not affect participant's self-efficacy and behavioral intentions toward exercising and dieting. That is, participants did not necessarily internalize the messages into their own beliefs of exercising and dieting. These results contradict past research in advertising context, which suggests that consumers report greater purchase intentions after watching a racially congruent spokesperson of the product. However, processing health messages is more complicated than processing commercial contents. Other factors, such as participant race, participant ethnic identity, also affect audience's processing of information. Interaction of race congruency and these variables will be discussed later in this section.

Race congruency had different effects on White American participants and Asian American participants. Results revealed that, when participant race was incorporated, Asian American participants reported greater perceived message credibility, and behavioral intentions

toward exercising and dieting after watching an Asian American vlogger compared to a White American vlogger. This result is in line with past research that suggests that audience members from minority groups favor spokespersons of their same race (Appiah, 2004; Kelman, 1961; Wang & Arpan, 2008) and are more likely to be influenced by spokespersons of their same race (Whittler, 1991). According to Arpan (2002), people from minority ethnic group tend to be more sensitive to ethnic group similarity than people from majority ethnic group, thus, they are more receptive and attentive to the cue of source race.

When incorporating ethnic identity, results demonstrated that Asian American participants with low ethnic identity (23.4% of all Asian American participants) reported greater self-efficacy towards exercising and dieting after watching an Asian American vlogger compared to a White American vlogger. This finding is in line with previous studies that suggest that audience members from minority groups favor spokespersons of their same race (Appiah, 2004; Kelman, 1961; Wang & Arpan, 2008) and are more likely to be influenced by spokespersons of their same race (Whittler, 1991). In addition, this study also confirms that this effect is significant for people in minority groups with low ethnic identity.

Contrary to prior research, White American participants consistently responded favorably to Asian American vloggers. White American participants reported greater behavioral intentions towards exercising and dieting after watching an Asian American vlogger compared to a White American vlogger. A possible explanation is the “model minority myth” stereotype that the majority ethnic group holds about Asian Americans. Model minority myth can be summarized as the belief that “Asian Americans, through their hard work, intelligence and emphasis on education and achievement, have been successful in American society.” (McGowan & Lindgren, 2006, p.50). Asian Americans are perceived as hardworking, intelligent and self-

disciplined (Cheryan & Monin, 2005). In this study, White American participants might perceive Asian American vloggers as more knowledgeable in general, therefore consider the messages conveyed by them as more credible. Another possible explanation is that Asians are perceived to have an expertise in health-related fields. According to Min and Jang (2015), Asian Americans have a disproportionate concentration on STEM (science, technology, engineering and math) and health-care occupations compared to other ethnic groups in the United States. In addition, Asians are generally perceived as “thinner” and “healthier” in terms of weight. These perceptions made White American participants more easily to be persuaded by the weight loss tips delivered by Asian American vloggers.

When ethnic identity was incorporated, White American participants with low ethnic identity (74.5% of all White American participants) reported greater self-efficacy towards exercising after watching an Asian American vlogger compared to a White American vlogger. This finding does not contradict prior literature that suggests that White audience members tend to favor White spokespersons (Appiah, 2001; Whittler, 1991; Whittler & DiMeo, 1991). According to Appiah (2002), people with low ethnic identity tend to be more open to other cultures and also messages conveyed by spokespersons from other races. White American participants with low ethnic identity were more susceptible to stereotypes of other races, which referred to the model minority myth in this context. Thus, they might be more likely to perceive Asian vloggers as more credible in terms of health issues and be persuaded by Asian American vloggers.

In this study, the ethnic identity variable was dichotomized into high and low in order to be incorporated with race congruency and participant race as the three-way interaction. This method reduced the variance in ethnic identity. In addition, ethnic identity was correlated with

participant race ($r = .51, p < .001$). 76.6% of Asian American participants were high ethnic identifiers, while only 25.5% of White American participants were high ethnic identifiers. Therefore, what being tested is not a three-way interaction. Further analysis is needed to unpack the effect of the interaction of race congruency, participant race and ethnic identity on outcome variables.

As hypothesized, perceived message credibility mediated the effect of the interaction of race congruency and participant race on behavioral intentions towards exercising and dieting. Prior research did not explain the process by which behavioral intentions were resulted from spokesperson race. This study addressed this gap by identifying the underlying mediation mechanism between race congruency and behavioral intentions. The interaction of race congruency between vlogger and audience, and participant race first affected audience's perceived message credibility, which then affected behavioral intentions towards exercising and dieting. In this sense, this study contributes to the existing literature by addressing the underlying mechanism between spokesperson race and audience's behavioral intentions. Source race has been generally considered as a peripheral processing cue in prior literature, however, this study reveals that source race could function as a central cue and affect perceived message credibility and then behavioral intentions through the central route of persuasion. Behavioral intentions resulted from the central route are more likely to last longer (Petty, et al., 2009), thus, this result provides a refreshing direction to study the effect of spokesperson race and its impact on health behaviors.

Limitations and future research

There are a number of limitations in this study including, participant demographics, participant engagement, study design, and video production. First of all, the experiment of this study was launched on the online crowdsourcing platform MTurk, so that the researcher was not able to verify whether each participant was fully qualified demographically for this study. The researcher was also not able to fully control the experiment environment and make sure each participant watch the full video. Future studies should consider launching experiments in a media lab. Another limitation is about the study design. As a single exposure study, this study was not able to imitate the parasocial relationship between vloggers and their followers, which is built through long-term exposure and interactions. Another limitation is about the manipulation video. The expertise cue was still not salient enough in the video. Future study on source expertise should make sure the expertise cue is salient enough to be noticed and remembered by the majority of participants. Future study could also use subscriber number as a cue of source expertise. Expert source and non-expert source could be distinguished through manipulation of subscriber number of the vlogger. Furthermore, this study was not able to incorporate many other factors that might affect audience's perception of the vlogger and the message in the video. Variables such as participant's educational level and satisfaction with current weight could be incorporated for future research about weight loss. Future research could also consider asking how much the participant enjoys watching the video, participant's average time spent on watching online videos per day and attitudes towards watching online videos.

Implications

The current study has investigated a novel form of inter-racial communications (White versus Asian), which was addressed by limited number of research in the past. Prior literature on

spokesperson effect of race mainly compared White and Black. This study contributes to the existing literature by addressing that the inter-racial communications between White and Asian is a unique dynamic, which could not be simply explained by past research that compared White and Black. Similar to Black American audience, Asian American audience prefers spokespersons from their same race. However, White American audience respond differently to Asian American spokespersons compared to responding to Black American spokespersons. Different stereotypes and mechanisms are in play, and ultimately lead to White American audience's favorable responses to Asian American spokespersons.

In addition, the current study has examined spokesperson effect in the interactive media environment. Past research generally investigated the role of race and expertise in commercial advertisement (Ohanian, 1991) and public service announcement (Kareklas, et al., 2005; Durantini, et al., 2006) contexts. This study addresses that spokesperson race could function as a central processing cue, and affect audience's perceived message credibility, which then affect audience's behavioral intentions in the online space. Spokesperson expertise is also shown to be a central processing cue, and message conveyed by an expert source is considered as more credible compared to that conveyed by a non-expert source. Internet has been proved to be a new form of symbolic environment where people learn from each other (Bandura, 2009). Thus, this study provides a refreshing direction to study spokesperson effect in the interactive media environment.

Furthermore, this study has investigated the spokesperson effect by treating a vlogger as the spokesperson of herself. Past research mainly tested media characters and endorsers of commercial products as spokespersons. In this sense, the current study provides insights for understanding communications between vloggers and their followers in the interactive media

environment. This study provides insights for understanding spokesperson effect and designing health campaigns in the interactive media environment.

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Tables

Table 3.1

Descriptive Statistics of Selected Spokespersons' Demographic Information

Variables	Mean and Standard Deviation			
	White spokespersons		Asian spokespersons	
	Emma	Emilee	Sarah	Claudia
Age	25.21(SD=3.74)	26.03(SD=3.83)	22.74(SD=3.02)	25.5(SD=3.75)
Gender ^a	2(SD=0)	2(SD=0)	2(SD=0)	2(SD=0)
Race ^b	1.35(SD=.95)	1.22(SD=.63)	2.82(SD=.56)	2.79(SD=.58)
Attractiveness ^c	7.68(SD=1.29)	7.05(SD=1.56)	6.9(SD=1.45)	5.5(SD=1.64)

Note. ^aScale ranged from male (1) to female (2), ^bScale ranged from White/Caucasian (1), Black/African American (2), Asian Pacific Islander (3), Hispanic/Latino (4), to I don't know (5), ^cScale ranged from 1 to 10.

Table 3.2

Scale reliability of measures

Variable	Cronbach's Alpha
Attitude towards exercising	.65
Attitude towards dieting	.56
Attitude towards drinking water	.5
Behavioral intention towards exercising	.78
Behavioral intention towards dieting	.92
Behavioral intention towards drinking water	single item
Self-efficacy towards exercising	.84
Self-efficacy towards dieting	.86
Self-efficacy towards drinking water	.64
Source credibility	.91
Message credibility	.88
Ethnic identification	.83

Table 4.1

Sample size, by participant's race, vlogger's race, and vlogger's expertise

	White vlogger		Asian vlogger	
	Fashion vlog	Health vlog	Fashion vlog	Health vlog
White participants	13	11	13	14
Asian participants	12	14	10	11

Table 4.2

Descriptive statistics for variables, by participant's ethnicity

Variable	Mean and Standard Deviation							Group difference
	All		White participants		Asian participants			
	Mean	SD	Mean	SD	Mean	SD		
Participant's age	25.61	3.18	26.22	3.04	24.96	3.23	$t(96) = 1.99, p = .05$	
Behavioral intention towards exercising	.59	.22	.61	.21	.57	.24	<i>ns</i>	
Behavioral intention towards dieting	.44	.21	.41	.22	.48	.20	$t(96) = -1.83, p = .071$	
Self-efficacy towards exercising	.36	.15	.35	.14	.37	.16	<i>ns</i>	
Self-efficacy towards dieting	.70	.22	.69	.20	.71	.24	<i>ns</i>	
Perceived source credibility	4.19	1.19	4.05	1.18	4.35	1.20	<i>ns</i>	
Perceived message credibility	4.33	1.23	4.34	1.23	4.31	1.25	<i>ns</i>	
Ethnic identification	3.36	1.04	2.86	.96	3.90	.83	$t(96) = -5.77, p < .001$	

Table 4.3

Pearson Correlation Coefficients for behavioral intention towards exercising, behavioral intention towards dieting, self-efficacy towards exercising, self-efficacy towards dieting, perceived source credibility, perceived message credibility, and ethnic identification

Variable	2	3	4	5	6	7
1. Behavioral intention towards exercising	.25*	.56**	.29**	.34**	.38**	.21*
2. Behavioral intention towards dieting		.39**	.49**	.18	.24*	.37**
3. Self-efficacy towards exercising			.61**	.10	.19	.33**
4. Self-efficacy towards dieting				.06	.24*	.39**
5. Source credibility					.57**	.21*
6. Message credibility						.16
7. Ethnic identification						

Note. *p< .05, **p<.01

Table 4.4


Descriptive statistics for outcome variables, by participant's ethnicity and race congruency

Variable	Mean and Standard Deviation			
	White participants		Asian participants	
	Racially congruent	Racially incongruent	Racially congruent	Racially incongruent
Behavioral intention towards exercising	.58 (SD= .21)	.64 (SD= .21)	.62 (SD= .26)	.53 (SD= .21)
Behavioral intention towards dieting	.36 (SD= .22)	.45 (SD= .22)	.52 (SD= .20)	.45 (SD= .19)
Self-efficacy towards exercising	.32 (SD= .14)	.38 (SD= .13)	.38 (SD= .16)	.36 (SD= .15)
Self-efficacy towards dieting	.70 (SD= .20)	.68 (SD= .20)	.75 (SD= .19)	.67 (SD= .27)
Perceived source credibility	4.22 (SD= 1.13)	3.90 (SD= 1.24)	4.69 (SD= .95)	4.07 (SD= 1.33)
Perceived message credibility	4.20 (SD= 1.33)	4.67 (SD= 1.14)	4.71 (SD= .93)	3.99 (SD= 1.40)

Figures


how to lose weight

Filters About 5,920,000 results




30 MINS DANCE WORKOUT

30 Mins Aerobic Dance Workout - Bipasha Basu Break free Full Routine - Full Body Workout


Good Health 24/7 

1 year ago • 17,468,963 views

Bipasha Basu herself performs a 30 mins hardcore dance aerobic workout and shows us her cool moves and a graceful way to ...




World's Heaviest Woman Attempts To Lose Weight To Wed

Barcroft TV 

1 year ago • 16,352,216 views

World's Heaviest Woman Attempts To Lose Weight To Wed SUBSCRIBE: <http://bit.ly/Oc61Hj> FIFTY-four stone mum Charity Pierce, ...

CC




How To Lose Weight Fast and Easy (NO EXERCISE) - Weight Loss - Lifestyle - Healthy Diet - Abigale K

Abigale Kirsten

2 years ago • 13,289,904 views

SEND ME YOUR WEIGHTLOSS BEFORE AND AFTERS: (preferably email me please)

EMAIL: Contact@AbigaleKirsten (Please ...)



Zumba Dance Workout for weight loss

OneHowto

10 months ago • 12,982,175 views


Have fun while you lose weight! Zumba Dance Workout is an enjoyable way to stay fit. Welcome to the best of Zumba, offered by ...

Figure 1.1. Top search results of “how to lose weight” on YouTube


how to lose weight vlog Q

Filters About 555,000 results


Did you mean: [how to lose weight blog](#)



Weight loss vlog: What I ate to lose over 75lbs
 Kimberlyuhles1
 2 years ago • 126,352 views
 Hi beautiful people :) Im all over the place with this blog and seem a little crazy but I hope you enjoy lol! Instagram name: ...




WEIGHT LOSS VLOG ~ Trying On Old Clothes After Losing 70lbs
 Jenns Weight Loss Journey
 3 months ago • 9,913 views
 After losing 70 lbs I decided it was time to clean out my closet of all my old clothes! I tried everything on and decided to keep a ...



My weight loss journey | LoseItLikeLauren
 LoseitlikeLauren
 9 months ago • 490,058 views
 Welcome! Here is a snippet of my weight loss journey which I have documented from day one, here on YouTube. I started losing ...

CC



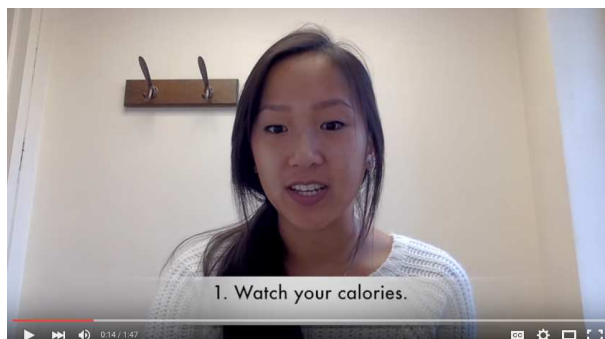
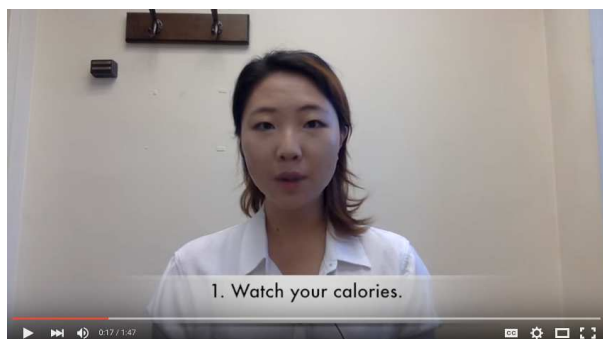
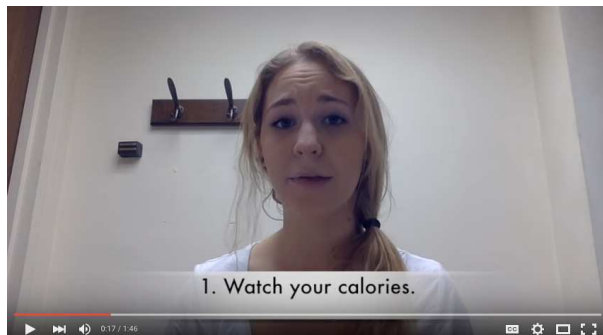
YOU WOULD BE SO MUCH BETTER IF..Weight Loss Vlog #29
 MakeupAndGlitter
 2 years ago • 11,882 views
 Follow Me? ;) <http://instagram.com/glitterandkayla>
<http://herestohealthyliving.tumblr.com> <https://twitter.com/kaylalaray> ...

Figure 1.2. Top search results of “how to lose weight vlog” on YouTube

Appendix A

1. Video screenshots

Each video was edited into two versions (health vlog and fashion vlog)



2. Video Script

Video Blog - to be read by all actors

Hi, guys! Angela here. Haven't seen you for a while! Guess what? I lost 10 pounds since my last video.

[Stands and shows body to camera]

How did I do that? First, I keep an eye on my calorie intake. I give up most of the junk food and frozen food, and start to eat a lot of veggies. Instead of ordering fries, I order a side salad. I also always throw away one side of the bread of my sandwich. It's all soaked with sauces and that's not good for you. I recently downloaded a wonderful app called MyFitnessPal, *[shows app on phone]* which helps me record what I eat, calculate my calorie limit, and tells me how many calories I can consume everyday. It makes dieting so much fun!

Second, EXERCISE! As a routine, I do cardio at least 3 times a week, like swimming, running, or even jogging. To make exercising more fun, I always make a workout playlist, which really motivates me. I walk a lot too. Sometimes I will park as far as I can and walk to wherever I am going. Remember, every step counts. Losing weight is not gonna happen over night, you need to find a workout routine you like and stick to it!

Oh, and finally, remember to drink a lot of water! *[Shows water bottle to camera]* I always carry a water bottle with me wherever I go. Sometimes when you feel hungry, you're probably just thirsty or bored. Stop drinking soda and juice! That is basically liquefied sugar. Even baby steps like this will make you healthier.

So those are the 3 main things that helped me lose weight and stay healthy! I know it isn't easy and it's OK to mess up sometimes. But never give up. See you in the next video!

Appendix B

1. Stages of Change Assessment Form

You will be presented with two categories, (exercise and food choices). For each category you will be presented with five statements. Circle the box beside the statement that best describes where you are in terms of exercise or food choices.

The **first category** is **exercise**. For regular moderate exercise, frequency will be set at 5 to 7 days per week for 30 to 40 minutes. Moderate intensity will be described as not being painful, increased breathing, however able to carry on a conversation while exercising, with a light sweat

- I currently do not *exercise* and I'm not thinking about starting.
 - I currently do not *exercise*, but I am thinking about starting.
 - I currently *exercise* but not on a regular basis.'
 - I currently *exercise* regularly but I have only begun to do so in the last six months
 - I currently *exercise* regularly and I have done so for longer than six months'.
-

The **second category** is **food choices**. Criteria for food choices will be set for five areas: including eating high fiber foods at a frequency of 1) 5-9 servings for fruits and vegetables daily, 2) 2-3 servings of beans and whole grains; partaking of high calcium foods 3) 2-3 servings of fat-free dairy; getting enough protein and avoiding high fat foods from 4) eating lean meats only and avoiding high fat and fried foods, and condiments; avoiding high sugar items like 5) high sugar drinks or foods like sugary sodas and deserts

- I currently do not make good *food choices* and I'm not thinking about starting.
- I currently do not make good *food choices*, but I am thinking about starting.
- I currently make good *food choices* but not on a regular basis.'
- I currently make good *food choices* regularly but I have only begun to do so in the last six months
- I currently make good *food choices* regularly and i have done so for longer than six months'.

2. Attitude towards exercising

Please rate the extent to which you believe that **exercising** in your leisure time over the next 6 months would be...

extremely boring | | extremely interesting

Please rate the extent to which you believe that **exercising** in your leisure time over the next 6 months would be...

extremely unenjoyable | | extremely enjoyable

Please rate the extent to which you believe that **exercising** in your leisure time over the next 6 months would be...

extremely harmful | | extremely beneficial

Please rate the extent to which you believe that **exercising** in your leisure time over the next 6 months would be...

extremely unhealthy | | extremely healthy

3. Attitude towards dieting

Please rate the extent to which you believe that **dieting** in your leisure time over the next 6 months would be...

extremely boring | | extremely interesting

Please rate the extent to which you believe that **dieting** in your leisure time over the next 6 months would be...

extremely unenjoyable | | extremely enjoyable

Please rate the extent to which you believe that **dieting** in your leisure time over the next 6 months would be...

extremely harmful | | extremely beneficial

Please rate the extent to which you believe that **dieting** in your leisure time over the next 6 months would be...

extremely unhealthy | | extremely healthy

4. Attitude towards drinking water

Please rate the extent to which you believe that **drinking more water** in your leisure time over the next 6 months would be...

extremely boring | | extremely interesting

Please rate the extent to which you believe that **drinking more water** in your leisure time over the next 6 months would be...

extremely unenjoyable | | extremely enjoyable

Please rate the extent to which you believe that **drinking more water** in your leisure time over the next 6 months would be...

extremely harmful | | extremely beneficial

Please rate the extent to which you believe that **drinking more water** in your leisure time over the next 6 months would be...

extremely unhealthy | | extremely healthy

5. Behavioral intention towards exercising

Please read the following statements and rate them from "not at all true" to "absolutely true".

I intend to exercise as part of my daily routine.

I intend to exercise as part of my daily locomotion (cycling)

I intend to exercise as part of my leisure time.

I have already planned precisely when to exercise.

I have already planned precisely where to exercise.

I have already planned precisely how to continue exercising even when I feel limited by poor health.

6. Behavioral intention towards dieting

Items

1. In the next three months, I intend to go on a diet.
Strongly disagree, Disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Agree, Strongly agree
 2. In the next three months, I intend to reduce my calorie intake.
Strongly disagree, Disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Agree, Strongly agree
- If I diet in the next 3 months, this would be . . .
3. *Harmful . . . beneficial*
 4. *Unpleasant . . . pleasant*
 5. *Useless . . . useful*
 6. *Foolish . . . wise*
 7. *Bad . . . good*
-

7. Behavioral intention towards drinking water

Items

1. In the next three months, I intend to drink more water.

Strongly disagree, Disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Agree, Strongly agree

If I drink more water in the next 3 months, this would be ...

2. *Harmful ... pleasant*

3. *Unpleasant ... pleasant*

4. *Useless ... useful*

5. *Foolish ... wise*

6. *Bad ... good*

8. Self-efficacy towards exercising

Please rate how confident you are that you could really motivate yourself to do things like these consistently, for at least six months.

Get up early, even on weekends, to exercise	<input type="text"/>
Get up earlier to exercise	<input type="text"/>
Stick to your exercise program after a long, tiring day at work	<input type="text"/>
Exercise even though you are feeling depressed	<input type="text"/>
Set aside time for a physical activity program, that is, walking, jogging, swimming, biking or other continuous activities for at least 30 mins three times per week	<input type="text"/>
Continue to exercise with others even though they seem too fast or too slow for you	<input type="text"/>
Stick to your exercise program when undergoing a stressful life change (e.g., divorce, death in the family, moving)	<input type="text"/>

9. Self-efficacy towards dieting

Please rate how confident you are that you could really motivate yourself to do things like these consistently, for at least six months.

Eat smaller portions at dinner	<input type="text"/>
Cook smaller portions so there are no leftovers	<input type="text"/>
Eat lunch as your main meal of the day rather than dinner	<input type="text"/>
Stay away from the buffet table at a party	<input type="text"/>
Plan snacking times in advance	<input type="text"/>
Eat smaller portions of food at a party	<input type="text"/>
Eat salads for lunch	<input type="text"/>
Share a party food plate with a partner	<input type="text"/>
Plan a dinner menu ahead of time	<input type="text"/>
Eat a light dinner such as salad or fish	<input type="text"/>
Avoid eating chips, dip and sweets at a party	<input type="text"/>
Eat less food during the day if you are attending a party at night	<input type="text"/>
Bring lunch from home instead of eating out	<input type="text"/>
Involve your entire family in meal planning	<input type="text"/>
Limit snacking to designated places in the home	<input type="text"/>

10. Self-efficacy towards drinking water

How sure are you that you can...

Drink only water whenever you are thirsty

Drink 4-6 glasses or bottles of water per day

Drink 4-6 glasses or bottles of water per day, even when stressed

11. Source credibility

Please rate the speaker in the video you just watched on the following traits: The speaker was...

Experienced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Inexperienced
Emphatic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Hesitant
Trained	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Untrained
Skilled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unskilled
Active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Passive
likable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	not likable
attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	not attractive

12. Message credibility

Please rate the message in the video you just watched on the following traits: The message...

is fair	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	is unfair
is unbiased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	is biased
tells the whole story	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	doesn't tell the whole story
is accurate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	is inaccurate
can be trusted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	cannot be trusted

13. Ethnic Identification

Please rate your agreement or disagreement with the following statements.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
I feel close to other \${q://QID21/ChoiceGroup/SelectedChoices} people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a strong sense of belonging to other \${q://QID21/ChoiceGroup/SelectedChoices} people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I were to describe myself to someone, one of the first things that I would say is that I'm \${q://QID21/ChoiceGroup/SelectedChoices}.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MENGMENG (KELLY) TANG

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Professional Experience

Research Intern, eMarketer

New York, NY

6/2015-8/2015

- Evaluated and selected data for charting
- Submitted chart requests to eMarketer Chart Creation System
- Collaborated with forecasting team to predict social media trends and market size
- Collected data on WeChat usage, reviewed reports, aggregated data into template, and presented findings to the team
- Conducted research on local digital agencies in China and India
- Translated reports about Chinese digital market

Research Associate, Native Advertising Project

S.I. Newhouse School of Public Communications

1/2015-5/2015

- Synthesized past research and literature about native advertising and branded content
- Analyzed survey data using SPSS, compared different ad options in terms of message recall and purchase intent
- Reported research results to research sponsors, and contributed to the final research paper

Editor Intern, Shanghai TV Station

Shanghai, China

6/2012-8/2012

- Assisted in TV program planning to increase viewership
- Collected news resources, and drafted program proposals
- Conducted interviews, and wrote press releases

Selected Project

Effects of spokesperson ethnicity and expertise on weight loss attitudes and behavioral intentions

Master Thesis

9/2015-present

- Produced videos for online experiment
- Designed online experiment and questionnaire on Qualtrics platform
- Analyzed quantitative results using SPSS Statistics

Education

M.A., Media Studies

5/2016

S.I. Newhouse School of Public Communications (Syracuse University)

•Relevant coursework: Quantitative and Qualitative Methods for Mass Communications Research, Human Computer Interaction, Psychology of Interactive Media, Experimental Design and Statistical Methods, Social Media Theory and Practice. •GPA: 3.7

B.A., International Communications Studies

2014

University of Nottingham

- Dean's Scholarship-Top 10% in Academic Standing
- Nottingham Advantage Award—Awards for Well-Developed Social and Learning Skills

Exchange student, Bucknell University

12/2012

Skills

Research:

Quantitative research
 Qualitative research
 Advertising research
 Data analysis
 Statistical data
 Survey design
 Experiment design
 Q methodology
 Textual Coding

Software:

Photoshop
 iMovie
 WordPress
 MS Office
 SPSS
 NVivo

Language:

English (Full professional proficiency)
 Chinese (Native proficiency)
 French (Limited working proficiency)

Others:

Google Analytics
 Hootsuite

Conference Presentations

Why do people decrease Facebook use? An extension of the innovation resistance theory to social media use termination and dormancy
 AEJMC Midwinter Conference
 Norman, OK, 3/2015

From Mysterious Orientals to the Model Minority Myth: a qualitative analysis of Asian YouTubers' response to stereotypes
 Popular Culture Association Annual Conference
 Seattle, WA, 3/2016