SOURCE CREDIBILITY AND CULTURAL ORIENTATION: THE EFFECTS OF AN ANTI-SMOKING PUBLIC SERVICE ANNOUNCEMENT AMONG CHINESE YOUNG ADULTS

by

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A THESIS

Presented to the School of Journalism and Communication
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Master of Arts

September 2017

THESIS APPROVAL PAGE

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Title: Source Credibility and Cultural Orientation: The Effects Of An Anti-smoking Public Service Announcement Among Chinese Young Adults.

This thesis has been accepted and approved in partial fulfillment of the requirements for the Master of Arts degree in the School of Journalism and Communication by:

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Degree awarded September 2017

THESIS ABSTRACT

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September 2017

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In the context of developing effective PSAs to help increase the number of young adults who quit smoking or don't start, this study took cultural orientation into account and assessed the persuasive effect of high and low source credibility. This present study showed that, in terms of attitude toward the ad message, people who were exposed to a commercial brand actually had a more positive attitude than those who saw the video that had CCTV as its producer. However, no significant differences were found in the other four constructs, including attitude toward anti-smoking, smoking-related social norms and subjective norms, smoking-related anticipated regret and intentions to quit or not start smoking.

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ACKNOWLEDGMENTS

I wish to express sincere appreciation to Professors Shafer, Shoenberger and Koranda for their assistance in the preparation and completion of this study. In addition, special thanks are due to my fiancé, Chuan, whose familiarity with the needs and ideas of the selected research area and quantitative research method were helpful during the early preparation and later recruitment.

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CHAPTER I

INTRODUCTION

According to World Health Organization, there are over 300 million smokers in China and approximately one million deaths every year in the country are caused by tobacco (World Health Organization, 2015). The Global Adult Tobacco Survey in China reported that nearly one-third (28.1%) of the population smokes, including 52.9% of men and 2.4% of women. Additionally, adolescent tobacco use is a growing public health problem in China. More than half (52.7%) of smokers aged 20-34 years started smoking daily before the age of 20 (World Health Organization, 2010). The 1996 and 2002 national surveys showed the prevalence of smoking among Chinese adolescents has increased substantially since the 80s (Yang et al., 1999; Yang, Ma, Liu, & Zhou, 2005). In recent years, 18.14% of Chinese boys and 3.16% of Chinese girls between the ages 13 and 18 years smoke (Ji, 2007; Yu et al., 2015).

Three reasons have been posited as main factors for the popularity of smoking in China. First, on average, Chinese people have low knowledge levels about smoking-related health consequences. For example, there were about 1 million smoking-related deaths every year in China; however, only 23% of Chinese people were aware that smoking could cause heart disease and stroke (World Health Organization, 2010). Second, until recently there was prolific direct and indirect tobacco advertising and promotion in all kinds of media platforms across China. It has only been within the last few years, that the cigarette advertising has been comprehensively banned by the Chinese government (Huang, 2012). Third, and perhaps the most distinct cultural explanation, cigarettes serve a unique social function in China. Giving cartons of cigarettes as gifts is wildly known and accepted (Qin et al., 2014), and it serves as a respected tool for maintaining friendships and beneficial business associations (Rich and Xiao, 2012).

Given the prevalence and social-cultural role of smoking in China, it is imperative to establish effective interventions and promote health recognition. Mass media communication is critical in advocating for implementing and enforcing smoke-free policies. The Chinese government has been producing mass media campaigns for tobacco control starting in several major cities, such as Beijing, Guangdong, and Chongqing, since the 1970s (Xu et al., 2015). The mass media campaigns exist in various formats such as oral communication, textbooks, billboards, newspapers, and television. However, studies about the effectiveness of anti-smoking messages in China still lags behind compared with Western countries. The findings from this study will help the developers of anti-smoking public service announcements (PSAs) to better understand young Chinese receivers. This present study uses a three-condition experimental design to examine the reactions to and impact of an anti-smoking ad on young Chinese adults. The conditions vary by source of the ad, which may be an especially relevant cultural factor.

CHAPTER II

LITERATURE REVIEW

Young Adults Targeted Studies and Anti-smoking PSAs on Television

Researches have shown that while cigarette consumption among youth (12-17 years) and adults (25 years and older) have declined to a great extent because of the growing anti-smoking media campaigns (Farrelly et al., 2005; Murphy- Hoefer et al., 2008; Sly et al., 2001), young adults, 18-24 years old, are now having the highest rate of cigarette consumption compared with any other age groups in the U.S. (20%) (Centers for Disease Control and Prevention, 2011; Gilpin et al., 2005; Lawrence et al., 2007; Ling et al., 2009; Song and Ling, 2011). The issue appears to be even more severe in China as more than half (52.7%) of smokers aged 20-34 years started smoking daily before the age of 20 (World Health Organization, 2010). In comparison with the U.S. to date, even fewer studies have been conducted with a focus on this particular age group in China.

Interventions designed to help to inhibit smoking among adolescents and young adults vary, but the conveyance of the message in social environments appear to be important because it is where the young people's socialization processes and behaviors develop (Yu et al., 2015). Anti-smoking messages in a larger social environment can come from many different approaches, such as parent, peer, school, and mass media, which leads to the question of how exposure to anti-smoking messages affects the smoking behaviors of adolescents and young adults. In order to effectively inhibit smoking, public health agencies around the world have explored solutions in a number of ways. One such way is the use of PSAs. Bator and Cialdini (2000) define PSA as an information campaign ''designed to inform or induce certain behaviors in specific audiences, generally for noncommercial profit using mass media-approaches'' (p.

527). This format of mass communication is used to provide the public with the information "about dangers, motivate them to reduce risks, or train them in skills that enable them to adopt more healthful lifestyles'' (McGuire, 1984. p.299).

However, Nasim and Corona (2010) claimed that prior to using the media to perform anti-smoking messages, it was necessary to examine which types of exposure could differently influence smoking related behaviors and intentions among young people from diverse ethnicities. Many recent studies have found similar results that support the role of media campaigns as effect in the prevention or reduction of young people smoking (Emery et al., 2012; Emery et al., 2005; Farrelly et al., 2002; Wakefield, Flay, Nichter, & Giovina, 2003). In China, a recent survey of students attending junior and senior high schools in four cities— Bayannaoer, Changchun, Dalian, and Nanjin--supported the idea that school based anti-smoking education and anti-smoking advertisements in the media (e.g., television, newspapers, radio and magazine) would serve a better preventive purposes than parent-child communication (Yu et al., 2015). Adolescents who said they were exposed to a large amount of anti-smoking media messages appeared less likely to smoke cigarettes on a regular basis and were less inclined to smoke in the future than those who were exposed to zero. In comparison, however, family–child communication showed barely any beneficial effect on Chinese adolescent prevention in the sample.

Among the various media platforms that people use to disseminate anti-smoking messages, television campaigns are one of the most studied and proved to be effective as they convey knowledge of smoking-related consequences through both images and emotional content (Wakefield, 2013). An influential TV campaign is an essential component of tobacco control. Televised PSAs not only can help smokers foster their intentions to quit and decrease smoking

pervasiveness (Davis et al., 2012; Friend & Levy, 2002), they can also help to raise the public's awareness of tobacco control policy implementation (Wilson et al., 2005).

Studies from many countries, such as America, Australia and South Korea, have examined the extent of benefit that TV anti-smoking PSAs can bring to society. For instance, studies in Australia and South Korean show that televised anti-smoking advertisement increase awareness of the health risks of smoking and motivation to quit (Hu, Sung and Keeler, 1995; Kim & Park, 2002; Brennan et al., 2011). In The United States, during the time from 2003-2009 when the New York Tobacco Control Program campaigns were launched, there appeared to be an increased cessation and reduced smoking rates as exposure to the anti-smoking advertisement campaign increased from 6% to 45% (Davis, 2012).

Similar beneficial results have also been discovered in China. In 2010, the Jiangsu Provincial Center for Disease Control and Prevention launched a one-month television campaign to create norms against giving cigarettes during the Chinese Spring Festival in two cities of Jiangsu Province. A televised advertisement "Giving cigarettes is giving harm," produced by the World Lung Foundation in 2008, was chosen to be aired on local television in each city during January and February. Through a street-intercept survey aimed at 18-45 years old men and women, Qin et al. (2014) found that 68.7% agreed the advertisement made them stop and think; 74.7% reported that it was relevant to them and their life; 73.3% thought that it provided new information; and almost half the participants decided to not give cigarettes as gifts to anyone in the future.

Source Credibility

Pornpitakpan (2004) summarized that a lot of studies that had tried to verify effective persuasion in commercial settings are guided through theories about attitude change and

persuasion in social psychology. The dimensions of source credibility had been frequently recognized to include expertise and trustworthiness. By definition, expertise indicated the extent that a communicator was seen to be able to provide correct assertions, and trustworthiness referred to the level of how an audience regarded the assertions as the ones that the communicator considered valid (Hovland, Janis & Kelly, 1953; Pornpitakpan, 2004). A source that is high in expertise tends to generate positive attitudes toward commercial advertisement (Braunsberger, 1996). Overall, the expert and trustworthy source evoked opinion change to the greatest extent (Pornpitakpan, 2004).

In the context of tobacco control messaging, it was suggested that the perceived credibility of the message source also plays an important role in determining if the media campaign is effective (Pornpitakpan, 2014; Schmidt et al., 2016; Sternthal, Phillips & Dholakia, 1978). Thus, the success of anti-smoking media campaigns rely upon several factors, including the perceived credibility of the source delivering the message. Getting a more comprehensive knowledge about how to exert the effect of source credibility on tobacco control persuasiveness is crucial to governments, national agencies and organizations (Schmidt et al., 2016).

Based on earlier studies about persuasive messaging, two models have been widely used to explain the function of source credibility in message impact, namely, the Communication-Persuasion Matrix and the Elaboration Likelihood Model of persuasion (ELM) (Rice & Atkin, 2012; Schmidt et al., 2016). The Communication-Persuasion Matrix refers to the persuasion process of audience from the receiving of the message to accept or reject, to attitude changes, and finally to behavior changes. The process can be influenced by a significant number of factors, such as the source (e.g., credibility), message (e.g., repetitiveness), channel (e.g., modality of message delivery), receiver (e.g., personal relevance), and destination (e.g., long-term or short-

term; McGuire, 2001; Schmidt et al., 2016). It was suggested that highly credible sources should increase the positive attitude toward the message and facilitate the capability of learning, which leads to a more successful persuasion (e.g., Hovland & Weiss, 1951; Kelman & Hovland, 1953). Additionally, the depicted role of source credibility in this model argues that a high credibility source can increase the acceptance of a persuasive message, because it is associated with gratifying outcomes, such as being correct (Heesacker, Petty, & Cacioppo, 1983). In short, when satisfying associations are connected with the source that is tied to the message, this kind of associations may increase the extent of persuasion (Hovland et al., 1953). The present study examines the practical application of the Communication-Persuasion Matrix to the persuasive effect of anti-smoking PSA among Chinese young adults by manipulating the sources in the shown videos.

ELM accounts for the approaches of how an audience perceives and digests information. More importantly, this model suggests two routes of information process that lead to an after message exposure (Petty & Cacioppo, 2014; Schmidt et al., 2016): the central and peripheral routes. In brief, the central route of processing is involved when the delivered message is highly relevant to the receiver since the person is more likely to evaluate the message and believe that a highly credible source can add more weight on persuasion (Petty & Cacioppo, 2015); reversely, the peripheral route is involved when the message is less relevant to the receiver since less effort is put into message evaluation and personal opinion about the source determines either accept or reject a message. This model can help to test the moderators in the anti-smoking PSAs effects, such as age, gender, smoking status, family and social environment. However, the present study will mainly focus on the examination and analysis of how exposure to different sources can affect the persuasiveness of an anti-smoking PSA among young adults in China.

Additionally, in commercial settings, the credibility of corporations could also influence an audience's attitudes toward the advertisement and their brands as well (Pornpitakpan, 2004). Similar suggestions were also made by Goldsmith, Lafferty and Newel (2000) that celebrity endorser credibility had its strongest influence on audience's reaction to the advertisement, whereas corporate credibility played a vital role in audience's attitude toward the brand.

Evidence showed that source credibility might influence trust in a tobacco control message as the credibility of the source, manipulated by the experimenters, increased from low (The American Tobacco Company) to medium (Life Magazine) to high (The Surgeon General's Report), the percentage of participants believing and agreeing with the message increased as well. However, different results were also found in earlier study (Bates et al., 2006) and it is not recommended to apply the model uniformly to people from diverse ethnicities. Because of the fact that differences in credibility perceptions among demographic groups exist, understanding how source credibility operates for different populations is equally important (Dutta-Bergman, 2003; Schmidt et al., 2016).

Cultural Orientation

Hornike and O'Keefe (2009) stated that a strategic communicator or a persuader is encouraged to adapt to his/her audience's different characteristics including demographic features, such as sex and age (e.g., Yoon, Lee, &Danziger, 2007), psychographic features, such as values, attitude, and lifestyles (Kahle, 1996; Novak & MacEvovy, 1990), information-processing preference (Stephenson & Southwell, 2006), regulatory focus (Keller, 2006), attitudinal ambivalence (Broemer, 2002), and so on. The study continued to argue that the adoption to the audience's values should probably be supported and proved to be the most essential, because an existing value in a culture sets and leads the principle in people's life. This

particular adoption of persuasive message can affect the audience's "attitudes, intentions, and behavior" to a great extent (Hornike and O'Keefe, 2009, p. 40). Hence, if the main argument in a televised anti-smoking advertising can resonate with the audience's value, then it is more likely for the communicator to successfully persuade the audience.

Individualism-Collectivism Dimension

Hofstede (1980, 2001) introduced and explained five essential value dimensions of how culture's overall atmosphere can be summarized and compared: individualism-collectivism (the relationship between the self and groups), high-low uncertainty avoidance (the tolerance for uncertainty), large-small power distance (the tolerance and acceptance of power inequality), masculinity-femininity (the distribution of gender roles), and long-term versus short-term orientation. These dimensions represented 49% of the country differences in the sample. According to Hofstede, each dimension influenced behaviors in various social setting such as education and communication. On Hofstede's ranking list, it is not difficult to realize that developed nations were over represented whereas Africa is under-represented. With the knowledge that people's values may be differently emphasized according to various cultures, it is suggested that advertising should follow the local values for maximum result.

Of all the five cultural orientations, this study aims to apply individualism-collectivism and large-small power distance to the selection and examination of Chinese anti-smoking PSAs. Basabe and Ros (2005) indicated that Hofstede's dimensions are considered as single dimensions with two ends. The Individualism dimension determined individualism, while the Power Distance dimension measured collectivism. In an individualist culture, each person is regarded the primary unit of existence (Lee & park, 2012). Therefore, an individualist society will focus on each citizen's own rights and self-pursuit. In other words, people who live in an individualist

culture are encouraged to promote introspection and emphasize the inner self (Basabe & Ros, 2005). In comparison, a collectivist society focuses more on the success and harmony as a unit of existence, and the emotional experience usually come from other's actions (Basabe & Ros, 2005). More specifically, individual desires appear to be lesser than the overall group's goal, whereas people are more encouraged and motivated to make personal achievements in individualist culture. In terms of values, people from collectivist societies are more likely to hide and sacrifice personal benefit to ensure harmony, family, cooperation and moderation (Shavitt et al., 2006; Triandis, McCusker, & Hui, 1990). In contrast, people from an individualist culture tend to value more personal benefits or risks, pleasure and hedonism (Markus & Kitayama, 1991).

According to a report by Hofstede et al. (1991), on the scale of individualism ranging from 0 (i.e., extremely low individualism) to 100 (i.e., extremely high individualism), the United States ranked at the very top with a score of 91. Although there was no data collected from Mainland China, the result showed Taiwan, which shares a similar cultural value with China, was ranking at 44th place with a score of only 17. This perspective received more support from other researches in the field of strategic communication. For instance, studies have shown that advertisements in the United States are more likely to stress self-reliance and personal rewards (Miracle, Chang and Taylor, 1992) while ads in countries that have a collectivist culture (e.g., South Korea, ranking at 18th place) tend to have an emphasis on family integrity and concerns for others. This can also be found in Chinese TV advertising. Like the two studies mentioned above, most of Chinese anti-smoking advertisings promote family value and caring for others around. In terms of response, Han and Shavitt (1994) found that U.S. college students tended to be persuaded by advertising appeals that focused on self-improvement and personal goals,

whereas South Korean (e.g., people from a collectivist culture) preferred messages emphasizing family integrity and harmony with others. The condition-controlled experiment in this present study follows this particular dimension of culture in order to enhance the persuasive result.

Large-Small Power Distance Dimension

The second cultural orientation, large-small power distance, explains that in a large power distance culture, it is believed that skills, wealth, power, and status should go together, and the powerful have privileges, while a small power distance culture emphasizes on all should have equal rights, and interaction is regarded to be independent of the actor's authority statuses (Hofstede et al., 1986, 1991). In addition, this model also claims cultures with a large power distance believe that whoever holds the power (e.g., the government) is right and good, whereas their cultural counterparts hold the value that the use of power should be legitimate and is subject to criteria of good and evil. Many studies have been devoted to apply this model in practical researches, such as education, medical decision-making, commercial advertisement, and so forth. Some turned out to be supported by the model, but some did not see the expected results at the same time. For instance, Alden et al. (2015) suggested based on their two experiments, that Japanese respondents (rate higher in collectivism) regarded decision making (DM) influence "less in terms of having power but more in terms of sharing information (p. 1138);" and that Americans (known as individualist) were more likely to favor shared power in medical DM.

Contrarily, Signorini, Wiesemes, and Murphy (2009) threw doubt to the Power Distance model and provided with suggestions for further research. According to Hofstede (2005), in larger power distance nations, like China, relations between students and teachers were more formal and hierarchical, and therefore, the education process was more teacher-centered; whereas in small power distance nations, such as UK, spontaneous

participation from student was viewed as ordinary and encouraged. However, different result appeared while applying cultural differences model in practical educational settings. Signorini, Wiesemes, and Murphy's inspection revealed that Chinese students, seen as members of large power distance nation, did not expect their teachers to be experts and would be willing to accept a teacher saying "I don't know (p. 260)." It was then suggested that this kind of inconsistency was omitted by Hofstede and other educationalists (e.g., Chang and Chin, 1999; Mitsis and Foley 2005; Munro-Smith 2002; O'Connell and Geiger 1999; Paulus et al. 2005; Pritchard and Skinner 2002).

If China falls into the category of large power distance based on Hofsdtede's model, it means that the Chinese are supposed to be more inclined to admit that whatever comes from the government should be good and to obey it. In the context of anti-smoking media campaigns, information from a higher credible source is more persuasive and liked; it seems likely that the source of the ad will impact the reaction and effectiveness of the ad. In addition, since ads with adapted value appeals are significantly more persuasive and better liked than ads with culturally unadapted value appeals (Jo and O'keefe, 2009), a strong argument in a Chinese anti-smoking PSA should come from the highest leadership (the government) that emphasizes on the harmony and integrity of a family or group instead of personal benefits of quitting cigarettes. However, no study has been devoted to examine if this argument will hold its ground while being applied to the production and response to TV anti-smoking PSAs.

In October 2016, Fotile (a well-known Chinese kitchen ventilator brand) produced a television anti-smoking advertising that told a story of how a mother tried to persuade her son to quit smoking. The video was around 3-4 minutes long and no sign of the source (Fotile) was shown to the audience until the very end. In order to examine and find if the discussed argument

can hold its ground, the present study's main goal is to combine Cultural Dimension model (Individualism and Power Distance) and the Communication-Persuasion Matrix (source credibility), then test their importance through a three-condition experiment where the same content (emphasizes on family importance and interrelation) is being presented, but with different source producers: a government source (relatively high credibility), a commercial brand source (relatively low credibility), and no source (control).

Apart from the two discussed cultural dimensions above, Masculinity-Femininity (the distribution of gender roles) is also another important perspective to look into in the context of smoking related issues in China. Overall, the recent number of young male smokers is much higher than the number of female smokers (Ji, 2007; Yu et al., 2015). An earlier survey in China showed that among a total number of 8444 participants, 16.4% thought smoking made boys more attractive whereas only 9% thought smoking made girls more attractive. Also, the story line in the selected Chinese anti-smoking advertising was about how much a mom hoped her son to quit smoking. The mom even said in the video, "I know it will be difficult to quit smoking, because I know being a man is already difficult." Such words might suggest that the Chinese society has different views and expectations of men and women in terms of smoking related issues. However, since the current study will mainly examine the effect of source credibility in an anti-smoking PSA, this dimension will not be included in the following experiment and discussion. The Masculinity-Femininity dimension should be examined in future research.

Normative Influence on Cigarette Use

Social networks like personal relationships and social interactions have been claimed to influence unhealthy behaviors (Christakis and Fowler, 2008; Smith and Christakis, 2008), which indicates that the social environment around people may work to maintain or even aggravate

these behaviors (Mead et al., 2014). Many studies have suggested that social norms is one of the most important aspects in the process of the how social environment affects health behaviors since social norms comprise "the rules and standards that are understood by members of a group, and that guide and/or constrain social behavior without the force of laws" (Cialdini & Trost, 1998, p.152; Mead et al., 2014).

One important approach of how environment gets through the formations of norms is "social exposure" which refers to the actual cues of how a type of behavior is pervasively accepted within a society (Mead et al., 2014). Social exposure can influence people's attitudes, beliefs and behaviors through its function of the "source of information about norms" (Mead et al., 2014, p. 140). In the case of cigarette use, for instance, witnessing groups of people smoking in public areas may generate the information about cigarette's prevalence and acceptance in the certain environment. The 2010 report of the Smoke-Free Ontario Scientific Advisory Committee concluded that in order to cutback smoking behaviors, individuals must be protected from social exposure to tobacco use (Smoke-Free Ontario e Scientific Advisory Committee, 2010). Therefore, the urge for studies and actions conducted toward decreasing the social exposure of smoking among the youth and young adults becomes more substantial since individuals in these age groups are more likely to mimic and learn such behaviors around them (Bandura, 1977).

Post ad attitudes toward two sources of social norms are examined in this present study. One is from the general expectation of social activities such as social tie construction and gathering, the other one is from a more subjective type of norm, such as the perception of opinions from romantic partners, children (current or future), parents and friends. According to earlier literature, smoking might play a role in the establishment of a certain cultural identity that was used by individuals to reinforce their in-group relationships with other members (Pampel,

2006) or to "fit in" (Borland, 1990; Carter-Pokras et al., 2011; Shiffman, 1982). In a result, an individual's social environment may encourage or push people to smoke to become more personally attractive and comfortable in social gatherings. Moreover, proximal members including families and close friends are also major sources of information about social norms in a society (Mead et al., 2014). Witnessing cigarette use from family members and close friends can predict smoking behavior, especially among the younger people since the behavior can be considered normative (Akers and Lee, 1996; Alexander et al., 2001; Ali and Dwyer, 2009; Costa et al., 2007; Ennett et al., 2010; Hall and Valente, 2007; Vries et al., 1995). Based on the cultural dimensions model, this particular phenomenon appears to be even more distinct and evident in China because of the characteristics of collectivist culture. A great amount of the existing anti-smoking messages in China use family and social settings to acquire persuasive effect. The designed questionnaire of this study tries to find if there exists a significant difference between attitudes toward both social norms and subjective norms after exposure to the assigned anti-smoking PSA with high/low credibility.

Smoking Related Anticipated Regret

By definition, regret is a negative emotion that impacts future decision making (Zeelenberg & Pieters, 2007) and furthermore, anticipated regret is distinct from other negative emotions, such as anxiety, guilt, disappointment or angry (Brewer, DeFrank & Gilkey, 2016). More specifically, anticipated regret adds cognition of the "wish to have made a different decision" (Brewer, DeFrank & Gilkey, 2016, p. 1265). Evidence has shown that anticipated regret can work as a relatively strong motivation to take action (Sandberg & Conner, 2008), and it has been used by researchers in the field of health behavior more than the other traditional risk constructs (Weinstein et al., 2007; Ziarnowski, Brewer, & Weber, 2009).

Earlier studies, based on the regret management theory, indicated that anticipating regret from taking action should prevent health risk behaviors, while anticipating regret from inaction should function in the opposite way (e.g., Ritov & Baron, 1995). However, more recent studies have found that anticipated inaction regret could be more strongly felt than anticipated regret from taking action (e.g., Brewer, DeFrank & Gilkey, 2016). Critiques threw doubts onto the lack of understanding of applying anticipated regret in the context of normative health behaviors. Unlike gambling or financial investing, normative health behaviors form and develop with a medical guidance and societal expectation from the surrounding environment (e.g., believing that cancer screening is "almost always a good idea"; supposing that quitting smoking will be good for health; Schwartz, Woloshin, Fowler, & Welch, 2004), such as working colleagues, family members, close friends or even strangers. Further, it was suggested that these types of norms and expectations and the feelings of blame they generate might increase the extent of regret from inaction. In the case of anti-smoking PSA in this current study, the message is to encourage and motive people to quit cigarette with an emphasis on a family tie. The son might expect to regret not quitting smoking if he were to get lung cancer or his family was to be harmed by second-hand smoke. The current study investigates if CCTV (the government), rather than Fotile (commercial brand) can generate greater regret if the participants do not quit smoking. Overall, the current study seeks to compare the source-induced differences of an anti-smoking ad targeting Chinese young adults on their attitudes about the ad, attitudes about smoking, relevant normative beliefs, anticipated regret, and smoking-related intentions. Thus, the following hypotheses are offered:

H1: For young Chinese adults, exposure to the governmental source anti-smoking PSA will result in more positive attitudes about the ad than when the source is a commercial brand.

H2: For young Chinese adults, exposure to the governmental source anti-smoking PSA will result in more positive anti-smoking attitudes than when the source is a commercial brand.

H3: For young Chinese adults, exposure to the governmental source anti-smoking PSA will result in more positive **(a)** social norms and **(b)** subjective norms than when the source is a commercial brand.

H4: For young Chinese adults, exposure to the governmental source anti-smoking PSA will result in more positive attitudes toward smoking related anticipated regret than when the source is a commercial brand.

H5: For young Chinese adults, exposure to the governmental source anti-smoking PSA will result in more positive attitudes toward intentions to quit (or not start) smoking than when the source is a commercial brand.

CHAPTER III

METHODOLOGY

Participants

A randomized between-subject experiment was run on Qualtrics with participants (*N*=92) recruited from a convenient sample of students enrolled in the University of Oregon in Eugene, OR. In order to participate, students had to be Chinese citizens between the ages of 18-25 years old, and currently studying at the University of Oregon, as the purpose of this study is to test persuasive effects among young adults who are Chinese. No other considerations, such as gender, major, or grade level were included in this study. To minimize potential bias, the purpose of this study and different experiment conditions were blinded to all participants. Respondents consisted of 45% men (*n*=41) and 55% female (*n*=51). Out of 92 respondents, 73% reported they were non-smokers, 10% said they smoked less than daily and 17% claimed they smoke on a daily basis. After four filtering questions based on the qualifications discussed above, participants also were asked to pass an audio test that was created as a multiple choice question to insure they can receive audio, since the experimental stimulus included audio. In total 7 participants did not pass the audio test and were not included in the study. Participants were then randomly assigned to watch one of three Chinese anti-smoking advertising. The condition manipulation was at the end of the ad and was a presentation of the ad source (CCTV, *n*=32 vs. Fotile, *n*=25 vs. none, *n*=35). After the ad participants answered a questionnaire (same for all conditions) measuring attitude toward the advertising's message, attitude towards smoking, smoking and anti-smoking norms, smoking-related anticipated regret, intentions to quit or not start smoking, and then some demographic items. This study was approved by the University of Oregon's Institutional Review Board (IRB).

Procedures

For the purpose of discovering how source status plays a role in the persuasion effects of an anti-smoking ad, three source conditions were presented. Participants were assigned randomly to watch the anti-smoking video with the exactly same content but different source producers at the end (China Central Television vs. Fotile vs. none). This video was edited based on a recent anti-smoking advertising "The Most Difficult Thing" from Fotile (Chinese kitchen ventilator brand). A well-known Chinese actress named "Meijuan Xi" played the main role as a mother in this video. The story started with the mother finding her working son had been smoking secretly and how she became disappointed but helpless at the same time. It then proceeded to her honest feeling about the fact of her son smoking cigarettes. The ad (in all conditions) was presented in Mandarin and is translated for this paper. The mom said, "I know you can't live without it…" She continued, "…when you feel depressed, it helps you to relieve…it helps you celebrate when you are promoted. Sometimes, I envy it, because it can give you the things that I can't…I know how difficult it is to quit it…" The content of this story ended with the mom expressing that though she knew her son could not live without the companion of cigarettes, she could not live without him, which indicated the main message of this anti-smoking advertising that you are not only quitting smoking for your own health, you are also quitting it for the benefit of your family.

In the control group where there is no source provided, the video ended there. In the CCTV version, the video ended here with the appearance of CCTV Advertising Center logo and a message that said, "For you and your family, please quit smoking." In the original condition with Fotile as its source producer, the video continued with the scene of the mom cooking a stir-fry that has her son's voice over in the background. The character said, "Mom knows about everything, but she does not realize that she is the one who also suffers from smoking. Every

time when mom cooks a meal, the large amount of smoke and fume created by frying has harmful substance just like smoking a cigarette…Fotile introduces you with the new W series…Protect you mom from the harms and say no to smoke before a meal. Quit smoking with your mom."

Measures

To examine the potential existing difference on the post message attitude toward the shown anti-smoking advertising, the questionnaire (see Appendix A) included questions that asked about participants' general health and smoking status, attitude toward smoking in general, surrounding social environment, subjective norms/family and friend endorsement, noticing anti-smoking information in media, opinion of effect of the selected anti-smoking television advertising, and so forth.

Attitude toward the message. This variable referred to the audience's attitude toward the message in the presented anti-smoking PSA. Five items that were rated on a 1 (*strongly disagree*) to 5 (*strongly agree*) Likert scale were used and averaged to create a composite measure with higher indicating more positive attitude of the ad's message (α= .829; e.g., "this ad has an important message to me," "this ad was relevant to me life").

Anti-smoking attitude. This variable referred to the participants' average attitude toward anti-smoking after watching the ad. Four items used a five-point Likert scale from "Strongly Disagree" to "Strongly Agree" (e.g., "this ad made me concerned about the effects of my smoking on my health"). Items were averaged to create a composite measure with higher indicating more positive attitude of not smoking (α= .861).

Smoking related social norms. The variable referred to the audience's post attitude about smoking's social status and functions in a society. Three items used a five-point Likert

scale from “Strongly Disagree” to “Strongly Agree” (e.g., “smoking makes social gatherings more comfortable”). Items were averaged to create a composite measure with higher indicating greater acceptance of smoking in social activities (α= .749).

Smoking related subjective norms. Another four items used a five-point Likert scale from 1 (*not at all influential*) to 5 (*extremely influential*) scale were averaged (α= .822) and used to measure attitude toward anti-smoking subjective norms with higher indicating greater degree of influence from others’ opinion (e.g., “how much does the opinion of romantic partners/parents/child/friends influence your decision about smoking cigarettes”).

Smoking-related anticipated regret. This variable referred to how much the participants would regret if either they are not be able to quit smoking or start smoking. Six items used a five-point Likert scale from “Strongly Disagree” to “Strongly Agree” (e.g., “If I did not quit smoking (or started smoking): -I would regret it”, “ if I did not quit smoking (or started smoking): -My family would regret it”). Items were averaged to create a composite measure with high indicating greater regret (α= .917).

Intentions to quit. Three items using a five-point Likert scale from “Strongly Disagree” to “Strongly Agree” were averaged (α= .718) and used to create a composite measuring how much do participants intend to quit smoking or not start smoking after exposure to the ad (e.g., “I intend to quit smoking in the next 6 months”).

CHAPTER IV

RESULTS

Analysis Strategy

In the original plan of this study, collected data should be analyzed by One-way ANOVA within SPSS since the study conducted a three-condition experiment where participants were divided into three independent groups. However, during the process of inspecting and cleaning the data, it was found that a little more than half (n=18, 51.4%) of the participants who were in the condition "no source" reported CCTV as the producer of the watched anti-smoking PSA (see Table 1). Therefore, in order to obtain a more valid result, the third condition (no source) was withdrawn from the analysis and further discussion.

Independent sample t-tests were therefore conducted to examine the hypotheses 1-5 comparing the CCTV and Fotile conditions. If Levene's Test for equality of variance was significant (i.e., unequal variance between groups), then results were reported from SPSS output under "equal variance not assumed."

H1: For young Chinese adults, exposure to the governmental source anti-smoking PSA will result in more positive attitudes about the ad than when the source is a commercial brand.

H1 examined if the anti-smoking PSA that was developed by the Chinese government than a commercial brand would generate more positive attitudes about the ad message among Chinese young adults. Significant results were found, however, in the opposite of the predicted direction, such that participants who watched the Fotile video scored higher in holding positive attitudes toward the ad message compared with those who watched the CCTV video. See Table 2 for H1 result statistics.

H2: For young Chinese adults, exposure to the governmental source anti-smoking PSA will result in more positive anti-smoking attitudes than when the source is a commercial brand.

H2 investigated different anti-smoking attitudes that were generated by the same anti-smoking PSA only with different source producer (CCTV vs. Fotile). No significant differences were found for health concern that resulted from smoking cigarette. See Table 2 for H2 statistics.

H3: For young Chinese adults, exposure to the governmental source anti-smoking PSA will result in more positive (a) social norm and (b) subjective norms than when the source is a commercial brand.

H3 investigated two categories of smoking related norms, namely, social and subjective (e.g., romantic partners, parents, child, and friends). This was predicted based on earlier literature that participants who were in the condition of CCTV than Fotile should be more likely to hold a positive attitudes toward both social and subjective norms. However, no significant differences were found between the two groups. See results in Table 2.

H4: For young Chinese adults, exposure to the governmental source anti-smoking PSA will result in more positive attitudes toward smoking related regret than when the source is a commercial brand.

H4 tested if the participants who were exposed to a governmental source anti-smoking PSA would react more positively than those who saw a commercial brand to smoking related anticipated regret. No significant different was found after running the data. Thus, this hypothesis is not supported by the experiment. See H4 result statistics in Table 2.

H5: For young Chinese adults, exposure to the governmental source anti-smoking PSA will result in more positive attitudes toward intentions to quit than when the source is a commercial brand.

H5, the last hypothesis, investigated the differences of responses between the two conditions regarding to smokers' intention to quit or not starting smoking. Again, according to the data analysis results, no significant differences were found. Therefore H5 is not supported. See H4 result statistics in Table 2.

CHAPTER V

DISCUSSION

Studies on the effects of source credibility in persuasive health behavior messaging have been largely devoted to the assumption that a highly credible source should generate more positive attitude toward the ad message and motive behavioral change while comparing a low credible source. More importantly, based on Hofstede's cultural dimension model, Chinese should be more inclined to believe and agree with a message when it is from the highest power representation (the government) in comparison with a lower credibility representation (a commercial brand). However, in the current study, it was pointed out that this approach might not hold its ground for Chinese young adults who had lived in the collectivist culture for more than 12 years. Among the five proposed hypotheses in this study, only one was found to be statically significant, but in the opposite of predicted direction that suggested for young Chinese adults, exposure to the governmental source anti-smoking PSA actually resulted in less positive attitudes about the ad than when the source is Fotile. The rest of the four hypotheses, including attitude toward anti-smoking, attitude toward social norms and subjective norms, attitude toward smoking related anticipated regret and attitude toward intentions of quit were not shown as statistically significant after the data analysis. Thus, the surprising results might be able to lead future research to find if the effects of persuasion on anti-smoking attitudes and intentions were moderated by other factors besides the credibility of source producer and subjects' country of origin.

Source credibility and cultural orientation on anti-smoking ad attitude construct. The examination of participants' attitude toward the ad message appeared to be the only result that was statistically significant, however in the opposite direction. Based on the earlier

literature, the roles of source credibility and cultural orientation should function together and enhance the effect of persuasion in anti-smoking PSAs. Additionally, the characteristics of a collectivist culture suggested that in general, people should be more likely to accept the inequalities that came from a higher power (Hofstede et al., 1986, 1991). That is to say, the anti-smoking message in PSAs should be more positively accepted and agreed with by the audience when the perceived source is China Central Television Station as it represents the Chinese government (highest national power) than Fotile (lower power). Conversely, the current study's experiment illustrated a conflicting result in the ad attitude construct regardless of the earlier statements. Participants who was exposed to the video with Fotile as its source producer reported higher scores than those who watched CCTV on the importance, relevance and informative value of the ad.

The result may suggest that Chinese young adults are in a shifting stage in terms of their understanding and acceptance of the relatively higher collectivist culture and the large power distance. Future studies can use this to further testify if significant differences exist between young adults and the elder age groups in China in the context of anti-smoking PSAs.

Source credibility and cultural orientation on other anti-smoking attitudes constructs. Apart from the ad attitude construct where significant difference was found in the opposite direction, no statistically significant results were found in the other four constructs, including attitude towards anti-smoking, attitude towards smoking related social and subjective norms, smoking related anticipated regret and intentions to quit.

Four suggestions can be made based on the non-significant experimental results of this current study. First, as mentioned in the earlier part of literature review, the credibility of corporations also functions as an important factor influencing the audience's determination and

attitude change (Pornpitakpan, 2004). Based on Fotile's (funded in 1996) official website, it says Fotile has become the most recognizable kitchen appliances brand of China, and it has successfully sponsored and spearheaded an amendment to the International Electrotechnical Commission's (IEC) standard for household appliances. This was the first time in history that a Chinese kitchen appliances brand guided the amendment of an international standard. Besides, the brand has also done many philanthropic activities and produced many other PSAs for the Chinese community. The participants in this present study might have had a positive attitude toward Fotile's credibility. However, in the case of Chinese anti-smoking PSAs, further research is needed to test the extent to which a brand's credibility can influence young audience's attitudes; or the extent to which the target audience is more content driven.

Next, these findings revealed that it might not be proper to assume an individual's or population segment's internalized cultural orientation simply based on their ethnicity or country of origin. As a matter of fact, a number of studies that used country of origin to represent subjects' cultural orientation have surprisingly failed to find significant differences in mass communication between countries of origin (e.g., individualist culture versus collectivistic culture; Brislin, 1974; Lee & Park, 2012; Wilcox, Ko and Gentry, 1996). The results of this study should alert future researchers and producers of anti-smoking PSAs not to assume that health related media campaigns should be culturally oriented simply through matching information and type of source producer to the population according to categorized cultural dimensions.

Thirdly, Hofstede's cultural dimensions model and his data might have gone out of date since the collection was done in the 1960s and 1970s. Hofstede's model seemed to fail to understand the flexible and changing nature of culture. In fact, data and studies showed that

China has been experiencing drastic changes (e.g., economic growth, urbanization, family size and geographical mobility) in the past decades in terms of the contributors to Individualism and Power Distance. Therefore, in order to have an updated and in-depth knowledge of how culture functions on the production of public health promotion (anti-smoking PSAs in this case), it is imperative to take the recent rapid changes of Chinese culture into account. Future research should be devoted to the examination of the difference on anti-smoking ad attitude between China young adults and elder age groups; and the difference on the reaction of young people between individualist oriented ad message (personal health) and collectivist oriented ad message (family/social expectation).

Last but not least, this present study only applied the Communication-Persuasion Matrix into the experiment to find if significant differences in post ad attitude existed between the controlled groups (CCTV vs. Fotile vs. none). However, the study did not fully incorporate the Elaboration Likelihood Model of persuasion (ELM) that added further argument about how relevance of the delivered message to the receiver influenced perceived source credibility (Petty & Cacioppo, 2015). Future research that studies the persuasive effect of anti-smoking PSAs might need to combine the two source persuasion models together to include examination of other moderators in the anti-smoking PSAs effects, such as age, gender, smoking status, family and social environment, etc. Future research may also examine the role of social norms, subjective norms and anticipated regret as moderators, because these factors can be more stable variables that are difficult to change from exposure to one anti-smoking ad.

CHAPTER VI

LIMITATIONS

While this present study adds some knowledge on the persuasive effects of anti-smoking PSAs among the Chinese young adults, a few limitations are also recognized. This study recruited 92 Chinese students age from 18 to 25 from the University of Oregon in Eugene, Oregon. Although all of the respondents had to go through a set of filtering questions for validation, such as "have you lived in China for at least 12 years," concern of how much they have been affected by the American culture remained unknown. Furthermore, the three-condition experiment conducted in this study was conducted online instead of bringing the participants to a laboratory. Therefore, potential sources of external factors (e.g., Internet connections, surrounding distractions, answers' independence) could possibly disturb the validity of the experimental results. Also, while this study's original plan was to have three groups exposed to different source producers (CCTV vs. Fotile vs. none), more than half of the participants in the no-source group reported CCTV as the producer of the viewed ad. The situation makes their responses to the survey questionable, and thus this group had to be taken out for the later data analysis. Lastly, this present study assumed CCTV was a more credible source than Fotile based on the earlier theories, however, questions should have been created to measure and confirm this assumption.

CHAPTER VII

CONCLUSION

In the context of developing effective PSAs to help increase the number of young adults who quit smoking or don't start, this study took cultural orientation into account and assessed the persuasive effect of high and low source credibility. This present study showed that, in terms of attitude toward the ad message, people who were exposed to a commercial brand actually had a more positive attitude than those who saw the video that had CCTV as its producer. However, no significant differences were found in the other four constructs, including attitude toward anti-smoking, smoking-related social norms and subjective norms, smoking-related anticipated regret and intentions to quit or not start smoking. Although the conclusions may be limited because of the relatively small sample size in an American university and potential external factors, these findings illustrate the importance of considering factors, such as corporate credibility, cultural changes and the use of persuasion models, to help the government, commercial brand or public health agencies enhance and strengthen the effectiveness of their PSA messages.

APPENDIX A

NATIONAL CULTURE VARIABLES AND GDP PER CAPITA

**Based on and adopted from…

Kim, S. (2017). National culture and public service motivation: investigating the relationship using Hofstede's five cultural dimensions. *International Review of Administrative Sciences*, 83, 23-40.

	Sample Size	Power Distance	Individualism	Masculinity	GDP per capita in 2004 (US$)
Australia	1,988	36	90	61	33,499
Belgium	1,338	65	75	54	34,641
Bulgaria	1,121	70	30	40	3,265
Canada	933	39	80	52	31,910
Czech Republic	1,226	57	58	57	11,166
Denmark	1,598	18	74	16	45,332
Dominican Republic	1,958	65	30	65	2,344
Finland	1,345	33	63	26	36,161
France	1,620	68	71	43	32,727
Germany (East)	587	35	67	66	32,515
Germany (West)	1,114	35	67	66	32,515
Hungary	1,012	46	80	88	10,074
Ireland	1,001	28	70	68	45,592
Israel	1,184	13	54	47	19,544
Japan	921	54	46	95	36,726
Latvia	1,067	44	70	9	6,084
Mexico	1,401	81	30	69	7,042
Netherlands	925	38	80	14	37,598
New Zealand	1,309	22	79	58	24,892

(Continued)

(Continued)

	Sample Size	Power Distance	Individualism	Masculinity	GDP per capita in 2004 (US$)
Norway	1,322	31	69	8	56,670
Philippines	1,200	94	32	64	1,085
Portugal	1,837	63	27	31	17,694
Russia	1,605	93	39	36	4,094
Slovenia	1,002	71	27	19	16,965
South Africa	2,884	49	65	63	4,607
South Korea	1,613	60	18	39	15,426
Spain	1,203	57	51	42	24,458
Sweden	1,371	31	71	5	40,316
Switzerland	1,078	34	68	70	50,952
Taiwan	2,171	58	17	45	14,985
UK	913	35	89	66	37,023
USA	1,518	40	91	62	41,548

APPENDIX B

QUESTIONNAIRE

Q2.5 Are you between 18-25 years old?
- ❍ Yes
- ❍ No

Q2.6 Do you currently smoke tobacco on a daily basis, less than daily, or not at all?
- ❍ Not at all
- ❍ Less than daily
- ❍ Daily

Q2.7 On average, how many times do you smoke per day (= number of cigarettes)?

Q2.8 Have you smoked tobacco daily in the past?
- ❍ Yes
- ❍ No

Q2.9 Have you quit smoking within the last year (past 12 months)?
- ❍ Yes
- ❍ No

Q3.1 In order to test that the audio will work, please listen to this sound test video. Then pick the choice that matches with the word that is said in this video. Please replay, if needed to hear the word.
- ❍ Oregon
- ❍ California
- ❍ Indiana
- ❍ New York

Q3.2 It seems like the audio may not have worked for you. Please check the volume on your device or headphones and try again. Then, pick the choice that matches with the word that is said in this video. If you are unable to select the correct choice this time, you will not be able to complete the survey.
- ❍ Oregon
- ❍ California
- ❍ Indiana
- ❍ New York

Q4.1 On the next page there is a video to watch. Please hit the play button when you are ready. The "next" button to continue to the next page will not be available for 3 minutes to give you time to watch the video. After the video, you will be asked questions about it and its topic.If you

are using your cell phone, please make sure to turn your phone horizontal （横屏模式）to allow a full screen.

Q4.2 Timing
- First Click
- Last Click
- Page Submit
- Click Count

Q4.3

Q5.1 On the next page there is a video to watch. Please hit the play button when you are ready. The "next" button to continue to the next page will not be available for 4 minutes to give you time to watch the video. After the video, you will be asked questions about it and its topic.If you are using your cell phone, please make sure to turn your phone horizontal （横屏模式）to allow a full screen.

Q5.2 Timing
- First Click
- Last Click
- Page Submit
- Click Count

Q5.3

Q6.1 On the next page there is a video to watch. Please hit the play button when you are ready. The "next" button to continue to the next page will not be available for 3 minutes to give you time to watch the video. After the video, you will be asked questions about it and its topic.If you are using your cell phone, please make sure to turn your phone horizontal （横屏模式）to allow a full screen.

Q6.2 Timing
- First Click
- Last Click
- Page Submit
- Click Count

Q6.3

Q7.1 According to the video, where did mom go during the day?

- ❍ School
- ❍ Mall
- ❍ Train station
- ❍ Farmer's market
- ❍ Friend's house

Q7.2 According to the video, what was mom cooking at the end?

- ❍ Pizza
- ❍ Noodle soup
- ❍ Dumplings
- ❍ Stir-fries
- ❍ Don't know

Q7.3 According to the video, which producer or brand name appeared at the end?

- ❍ Fotile
- ❍ Apple
- ❍ CCTV
- ❍ Alibaba
- ❍ None

Q8.1 Have you seen this ad before today?

- ❍ Yes
- ❍ Not sure
- ❍ No

Q8.2 This ad was...

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Funny	❍	❍	❍	❍	❍
Powerful	❍	❍	❍	❍	❍
Boring	❍	❍	❍	❍	❍
Emotional	❍	❍	❍	❍	❍

Q8.3 This ad made me feel...

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Sad	❍	❍	❍	❍	❍
Angry	❍	❍	❍	❍	❍
Happy	❍	❍	❍	❍	❍
Scared	❍	❍	❍	❍	❍
Guilty	❍	❍	❍	❍	❍
Surprised	❍	❍	❍	❍	❍
Loved	❍	❍	❍	❍	❍

Q8.4 Please indicate your level of dis/agreement with the following statements about the ad you just watched.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
This ad was clear.	❍	❍	❍	❍	❍
This ad had a message that is important to me.	❍	❍	❍	❍	❍
This ad made me stop and think.	❍	❍	❍	❍	❍
This ad was relevant to my life.	❍	❍	❍	❍	❍
This ad provided new information to me.	❍	❍	❍	❍	❍

Q8.5 Thinking about the ad you just saw, please indicate your dis/agreement with each of the following statements.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
This ad made me concerned about the effects of my smoking on my health.	❍	❍	❍	❍	❍
This ad made me feel concerned about the effects of my smoking on the health of a person around me.	❍	❍	❍	❍	❍
This ad made me more likely to quit.	❍	❍	❍	❍	❍

Q8.6 Please indicate your dis/agreement to each statement based on the ad you just saw.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I will talk or discuss this ad with others.	❍	❍	❍	❍	❍
This ad made me want to try to persuade others to quit smoking?	❍	❍	❍	❍	❍
Overall, I thought this ad was a very good anti-smoking advertisement.	❍	❍	❍	❍	❍
This ad is trying to manipulate me.	❍	❍	❍	❍	❍
This ad annoys me.	❍	❍	❍	❍	❍

Q9.1 42. If I did not quit smoking (or started smoking):

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I would regret it	❍	❍	❍	❍	❍
It would bother me	❍	❍	❍	❍	❍
I would be disappointed	❍	❍	❍	❍	❍
My family would regret it	❍	❍	❍	❍	❍
It would bother my family	❍	❍	❍	❍	❍
My family would be disappointed	❍	❍	❍	❍	❍

Q10.1 Would you say that in general your health is…?

- ❍ Terrible
- ❍ Poor
- ❍ Fair
- ❍ Good
- ❍ Excellent

Q10.2 Please indicate your level of dis/agreement with the following statements.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I intend to quit smoking in the next 6 months.	❍	❍	❍	❍	❍
I'm likely to be successful in quitting smoking sometime in the next year.	❍	❍	❍	❍	❍
I'm thinking about quitting smoking.	❍	❍	❍	❍	❍
I have no intention to quit smoking anytime soon.	❍	❍	❍	❍	❍

Q10.3 Do you have any intention to start smoking in the future two years?

❍ Yes

❍ No

Q11.1 Thinking about each of the following individuals or groups, how much would they approve or disapprove of your smoking cigarettes?

	Strongly disapprove	Disapprove	Neither approve or disapprove	Approve	Strongly approve
Romantic partner	❍	❍	❍	❍	❍
Child (current or future)	❍	❍	❍	❍	❍
Parents	❍	❍	❍	❍	❍
Friends	❍	❍	❍	❍	❍
Society	❍	❍	❍	❍	❍

Q11.2 Thinking about each of the following individuals or groups, how much does the opinion of the following individuals or groups influence your decision about smoking cigarettes?

	Not influential at all	Slightly influential	Moderately influential	Very influential	Extremely influential
Romantic partner	❍	❍	❍	❍	❍
Child (current or future)	❍	❍	❍	❍	❍
Parents	❍	❍	❍	❍	❍
Friends	❍	❍	❍	❍	❍
Society	❍	❍	❍	❍	❍

Q12.1 Please indicate your level of dis/agreement with the following statements.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Smoking is/would be harmful to my health.	❍	❍	❍	❍	❍
Smoking is a major or contributory cause of bladder cancer, lung cancer, oral cancer, neonatal death, etc.	❍	❍	❍	❍	❍
Your current knowledge is sufficient as a basis for not smoking and dissuading others from smoking.	❍	❍	❍	❍	❍
Most smokers could stop if they wanted to.	❍	❍	❍	❍	❍
It is annoying to be near a person who is smoking.	❍	❍	❍	❍	❍
Most people will NOT give up smoking even if their doctor or family members tell them to.	❍	❍	❍	❍	❍

Q13.1 If one of your best friends were to offer you a cigarette would you try it?

- ❍ Definitely not
- ❍ Probably not
- ❍ Might or might not
- ❍ Probably yes
- ❍ Definitely yes

Q13.2 Please indicate your level of dis/agreement with the following statements.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Smoking makes social gatherings more comfortable.	❍	❍	❍	❍	❍
Men who smoke have more friends.	❍	❍	❍	❍	❍
Women who smoke have more friends.	❍	❍	❍	❍	❍
Anti-smoking messages from teachers, school, and textbooks would be more likely to advise young people to prevent/quit smoking.	❍	❍	❍	❍	❍
Mass communication, like culturally oriented anti-smoking campaigns, would be more likely to advise people to quit smoking.	❍	❍	❍	❍	❍

Q14.1 In recent months, how often have you seen anti-smoking commercials...

	Never	Less than once per month	1-3 times per month	1-3 times per week	Daily or almost daily	More than once a day
on TV	❍	❍	❍	❍	❍	❍
on the radio	❍	❍	❍	❍	❍	❍
on billboards	❍	❍	❍	❍	❍	❍
in magazines	❍	❍	❍	❍	❍	❍
in newspapers	❍	❍	❍	❍	❍	❍

Q14.2 To what extent do you think anti-smoking ads have...

	None at all	A little	A moderate amount	A lot	A great deal
made you less likely to smoke cigarettes	❍	❍	❍	❍	❍
overstated the dangers or risks of cigarette smoking	❍	❍	❍	❍	❍

Q15.1 Please select your gender?

- ❍ Male
- ❍ Female
- ❍ Other/prefer not to answer

Q15.2 What year in school are you?

- ❍ Freshman
- ❍ Sophomore
- ❍ Junior
- ❍ Senior
- ❍ Graduate student

Q15.3 What is your studying major?

Q15.4 Where do you come from? (City, Province, China)

APPENDIX C

RECRUITMENT SCRIPT

Hello - My name is Yan Li and I am a second year graduate student from the School of Journalism and Communication at the University of Oregon. I'd like to speak with you about participating in my research study. This is a study about the effectiveness of Chinese anti-smoking public service announcements on young adults. You're eligible to be in this study because you are above 18 years old and originally from People's Republic of China.

If you decide to participate in this study, you will be receiving a Qualtrics link to the webpage that has one anti-smoking public service announcement conducted in Chinese and a questionnaire (in English) afterwards. The whole activity will be completed online, and it should take you around 10 to15 minutes. One out of every ten participants will be randomly selected and receive a 30 dollar Amazon gift card sent to their email after the study.

Remember, this is completely voluntary. You can choose to be in the study or not. If you'd like to participate, we can go ahead and figure out the best way for me to send you the online study link. If you need more time to decide if you would like to participate, you may also call or email me with your decision.

Do you have any questions for me at this time?

If you have any more questions about this process or if you need to contact me about participation, I may be reached at 541-525-2698 or yli17@uoregon.edu.

Thank you so much.

TABLES

Table 1: Source Producer Identify Scores for Experimental Groups

Question: which producer appeared at the end?	The seen ad			
	CCTV	Fotile	No Source	Total
Fotile	3	21	4	28
	9.4%	84.0%	11.4%	30.4%
CCTV	28	1	18	47
	87.5%	4.0%	51.4%	51.1%
Alibaba	0	1	0	1
	0.0%	4.0%	0.0%	1.1%
None	1	2	12	15
	3.1%	8.0%	34.3%	16.3%

Table 2: Independent sample *t*-tests, H1-H5 post attitudes toward ad and anti-smoking related constructs.

Post attitudes	Condition	*M*	*SD*	*t*-statistic	*df*	Sig.
Attitudes toward ad message	CCTV	3.39	0.92	-2.35*	55	.022
	Fotile	3.93	0.76			
Attitudes toward anti-smoking	CCTV	3.11	0.80	-1.85	10	.093
	Fotile	3.83	0.50			
Social norms	CCTV	2.47	0.95	-0.95	55	.34
	Fotile	2.70	0.81			
Subjective norm	CCTV	3.20	1.01	-0.77	55	.44
	Fotile	3.43	1.19			
Anticipated regret	CCTV	3.52	0.86	-1.42	55	.16
	Fotile	3.84	0.80			
Intentions	CCTV	2.87	0.60	-1.13	10	.28
	Fotile	3.37	0.89			

Note: *$p < .05$.

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