Tobacco Control Intervention: A Comparative Multimodal Discourse Analysis of Video Advertisements in China and Australia

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Significant differences in tobacco-control initiatives and achievements between Australia and China have been witnessed in the world, despite the fact that the countries share the Asia-Pacific region and have intimate relationships. The smoking rate in Australia has been on a downward trend since the 1980s and therefore Australia has been portrayed as a “dark market” by global tobacco industry companies. However in China, cigarette smoking is the chief killer that causes deadly health risks to both direct users of tobacco and people exposed to second-hand smoke. Non-communicable diseases due to this have caused great burden to the national medical resources. As a vital intervention tool of mass media campaign, public health advertisements on tobacco-control have played an important role in influencing the cognition and behavior of recipients. This study aims to compare the strategies adopted by the advertisements in Australia and China through corpus-driven multimodal discourse analysis to conduct quantitative analysis and qualitative case study. The results of comparative analysis indicate different pathways of tobacco-control advertisements constructions in the two countries that Australian tobacco-control advertisements achieved better in terms of health communication intervention to encourage cessation among smokers and reduce smoking initiation among potential smokers at the population level. To be compared, Chinese tobacco-control advertisements placed a heavier emphasis on the health hazards caused by second-hand smoking to protect people from the attributable morbidity and mortality. From the perspective of content theme, this study argues that Chinese tobacco-control advertisements should shift the focus to the health damage of smoking to smokers which is more targeted and fundamental. From the perspective of multimodal presentations of the video advertisements, a more prominent demonstration of the health damage is recommended. Moreover, this study argues that cultural-oriented strategies should be developed in the tobacco-control advertisements if considering the cigarette sharing and gifting social phenomenon in the Chinese society.
Introduction

Tobacco products are deemed as one of the risk commodities in modern life which are associated with a wide range of negative health outcomes for individuals and huge public health burden to the societies particularly in low-and-middle-income countries. Australia and China have undergone significantly different paths of tobacco-control initiatives and achievements. Representing high-income country in the Asia-Pacific region, Australia has witnessed a downward trend of smoking prevalence since the 1980s, and therefore Australia has been portrayed as a “dark market” by global tobacco industry companies. However in China, cigarette smoking is still the chief killer that causes deadly health risks to both direct users of tobacco and people exposed to second-hand smoke, and thereby has given rise to non-communicable diseases epidemic in the current China, which requires sustained and effective control. Public health advertisement (PHA) on tobacco control has emerged as a vital intervention tool which usually used by health organizations to implement tobacco control policy and regulatory in both national and international levels at present. Meanwhile, the communicative function of the advertisements to framing the health risks of tobacco and raising awareness on the population level has been investigated. Tobacco-control video PHAs are very accessible for the general public because they are usually showed on digital media with multimodal (textual and audio-visual) presentations and therefore has been considered as an effective approach to tobacco control intervention. In tradition, tobacco control intervention has been intensively investigated from the perspectives such as epidemiology and sociology, however, the research on the mass media campaigns of tobacco-control from sociolinguistics aspect is still in deficiency thus remains gap to be filled. This research aims to compare the tobacco-control video PHAs published in Australia and China in the recent decades and applies corpus-driven multimodal discourse analysis as the research approach to examine the communicative strategies manifested by textual features and multimodal presentations of video advertisements. To our knowledge, this is a pioneering work because it is the first piece of cross-cultural comparative study on tobacco-control video advertisements which applies corpus linguistic techniques and multimodal discourse analytical framework.

Research Questions Investigated

This study aims to investigate three questions: (1) How do public health advertisements use distinct strategies to communicate the health risks of smoking in Australia and China? (2) What are the differences from textual and audio-visual presentations between tobacco-control video advertisements in the two countries? (3) What are the suggestions in terms of developing more effective tobacco-control advertisements?

Data and Methods

The research data comprises tobacco-control public health video advertisements published in Australia and China in the recent decade, and 19 and 14 pieces of video advertisements are collected respectively as raw data and subjected to be coded to make them multimodal discourse analysis friendly. Australian advertisements were numbered A1 to A19 and Chinese advertisements were numbered C1 to C14. Coding is the first step to process
the research data that the coding framework applied in this study is tailored on the basis of the established frameworks proposed by Baldry and Thibault (2006) and McGee et al. (2014), and adapted according to the content themes and multimodal features of the research data.

The coding framework applied in this research consists of 9 variables, i.e. content themes (addiction and quitting, negative health effects, smoking attributed diseases, cancer, smoking area, second-hand smoking, youth smoking behavior, smoking ban), music tracks (horrible, blue, mild, relaxing), video length (0-30s, 31-60s, exceed 60s), narrative tones (strong, neutral, mild), popularity of actors (celebrity, common people, mixed), advertising scenarios (hospital, home, outdoors, mixed, virtual scene), appearance of actors (healthy, unhealthy, mixed), any smokers (yes, no), and any patients (yes, no). The coding procedure is conducted by three coders independently, the inter-rater agreement is assessed by Kappa statistic, and the agreements among the three coders are in high rates. Therefore, it is appropriate to deposit these video advertisements into data archive and process with statistic tools subsequently. All statistical analyses are performed by SPSS 24.0. After the quantitative analyses, a qualitative multimodal discourse analytical approach was adopted for case analysis. The systematic application of linguistic sources, non-linguistic sources, as well as “the meaningful interaction of verbal, visual, and sound data” (J. Oddo, 2013, pp. 240-241) distinguishes video materials with mono-modal information and therefore requires investigation in this research, so a toolkit of the software LIWC2015, WordSmith, and ELAN is applied as technical assistance. The hybrid method applied in this study intends to maintain the generalizability supported by the quantitative approaches as well as to capture the deep understanding that qualitative approaches could attach.

Results of Corpus-driven Discourse Analysis: 33 Pieces of Advertisements

A total amount of 33 pieces of tobacco-control video advertisements are eligible and collected from several video platforms. The 19 pieces of Australian video advertisements are authorized by the Australian government Canberra, the Cancer Institute NSW, the Cancer Council, the Health Promotion Board, or the National Tobacco Campaign (a federal, state and territory health initiative). The 14 pieces of Chinese video advertisements are authorized by the China Central Television (CCTV), the National Health and Family Planning Commission, or the National or Provincial Disease Control and Prevention Center. The textual information of these video advertisements are transcribed into bilingual corpora of tobacco-control advertisements to conduct corpus-driven analysis and the results of coding are subjected to conduct statistical analysis. As a result, Australian and Chinese tobacco-control video advertisements have shown 3 major differences from the perspectives of content themes, high-frequency lexis, and advertising scenarios and actors.

8 content themes were identified in total, the proportions of which are “negative health effects” (22%), addiction and quitting (18%), smoking attributed diseases (15%), cancer (12%), second-hand smoking (12%), smoking area (9%), youth smoking behavior (6%), and smoking ban (6%). The 3 predominant content themes of Australian advertisements are “addiction and quitting”, “negative health effects” and “smoking attributed diseases”, while in Chinese advertisements, “second-hand smoking”, “smoking area”, and “youth smoking behavior” are the chief themes. Through a further chi-square test, a significant difference (p<0.05) is argued that Australian advertisements emphasize more on the content themes relevant with the health damage to smokers, while Chinese advertisements pay more attention to the risks to people affected by second-hand smoke, rather
than the direct users of tobacco products. The distinct models of content themes can be symbolized by two remarkable advertising slogans, i.e. “every cigarette is doing you damage” in the Australian advertisements and “passive smoking, I refuse” (被吸烟，我不干) in the Chinese advertisements.

High-frequency lexis analysis is conducted with the assistance of LIWC and WordSmith. Firstly, the transcriptions of these 33 pieces of video advertisements are obtained by ELAN, i.e. 6216 and 901 characters in English and Chinese respectively. The bilingual video transcriptions are subsequently compiled into the specialized corpora and analyzed by WordSmith for Wordlist generation. The analysis finds that tobacco products and smoking behavior related words are in high-frequencies in both Australian and Chinese video advertisements. However, heterogeneity also presents that in Australian advertisements, the words “quit”, “quitting”, “damage”, “cancer”, “lung” and “you” are among the highest frequency, while in the Chinese counterparts, the words “second-hand” (二手), “other people” (他人), “life” (生命), “health/healthy” (健康) are predominantly emphasized. In this regard, tobacco-control advertisements in Australia are liable to specify the health hazards of smoking straightforward and take notice of the communication with target recipients. However, the preferential concern of Chinese tobacco-control advertisements is the moral criticism of second-hand smoking to discourage smoking in workplaces and other public places. To be compared, the high-frequency words used in Chinese advertisements are abstract and indifferent, such as “life” and “health/healthy”, whereas the Australian counterparts are more specific and alarming, such as “lung”, “cancer”, and “damage”.

Scenarios and actors are necessary and important components of video advertisements, which can convey ample connotations to the recipients visually and directly. To sum up, 5 scenarios were identified and the scenes “mixed” and “hospital” are frequently framed by Australian tobacco-control advertisements. It is surprising that no hospital scene was shown in the Chinese advertisements, however, the scene “home” ranked first. Connected with the distributions of content themes, it indicates that negative health effects theme packed with the scene of hospital is one of the typical advertising strategy of Australian tobacco-control advertisements, while second-hand smoking theme combined with the scene of home is a major advertising strategy found in Chinese tobacco-control advertisements. Following the four-dimension categorization of advertising actors, i.e. popularity of actors (celebrity, common people, mixed), appearance of actors (healthy, unhealthy, mixed), any smokers (yes, no), and any patients (yes, no), significant differences are argued that 21% of the Chinese advertisements are featured by well-known public figures with healthy-looking, while smokers and patients actors are seldom found. On the contrary, no public figure was shown in the Australian advertisements, and the unhealthy-looking smokers and patients are in significant higher proportions than the Chinese counterparts. It is concluded that the Chinese tobacco-control video advertisements focus heavily on the health risks of second-hand smoking by presenting the home scene and sometimes associated with the appearance of celebrities. The Australian tobacco-control video advertisements predominantly focus on the health damage of smoking and encourage cessation by presenting distressing hospital scene and the miserable patients (example shown in figure 1).
Results of Multimodal Discourse Analysis: 2 Video Clips

To obtain a deep understanding of the textual-and-audio-visual information interweave in tobacco-control video advertisements, two pieces of video advertisements A13 and C3 which are representative in terms of content themes are carefully scrutinized by applying multimodal discourse analytical framework. A13 is a typical Australian tobacco-control advertisement of “negative health effects” content theme. The video clips graphically demonstrate how much tar a pack-a-day smoker accumulates in the lungs over the course of a year, and how the tar can damage the lungs. The advertisement features two characters—a female smoker and a male surgeon, with two corresponding scenarios—home and an operating room. On the basis of the frame-by-frame annotation function provided by ELAN, the video was divided into four tiers, i.e. feature description of actors, narratives, descriptions of scenario, and subtitles, to conduct multimodal discourse analysis. At the beginning of the advertisement, the female smoker lights a cigarette while lying on sofa, with a horizontal, oblique and close-up lens focused on her facial expressions and gestures. The visual information presentations of a dull and expressionless smoker is in consistent with the content theme of tobacco-control. The next shot shifts and focuses on the lit cigarette and the smoke emissions, along with the lens zoomed in gradually with a perspective camera angle, simultaneously with the smoke, from her trachea to the speckled lungs covered with smoke tar. At this point, the video uses a special perspective to visualize the invisible hazards of smoking and highlight the direct cause-and-effect relationship between smoking behavior and health damage. The subsequent scenario shifts to an operating room with a surgeon splitting a piece of lung with scalpel in a surgical tray, and with a jug of smoke tar pouring to the cross section of lung, which is the amount of tar that a pack-a-day smoker would produce annually. The scene of operating room adopts a bird’s eye view so that the whole experiment process is clearly displayed. Then, the lens is gradually withdrawn from the smoker's respiratory tract and refocused on the smoker's distressing facial expressions and fingers holding the cigarette, accompanied by a loud cough. In the end of the advertisements, a graphic warning with the slogan “every cigarette is doing you damage” appears in the center of the image, along with a quit-line to implement the communicative function (images output shown in figure 2). Generally speaking, the whole advertisement intuitively reproduces the causal relationship between smoking
behavior and the negative health effects, visualizes the invisible damage, and produces a strong visual impact with the use of lens appropriately.

C3 is a typical Chinese tobacco-control advertisement thematically framed to discourage second-hand smoking or passive smoking. The scenario is virtual and the two actors are celebrated public figures (the male is the academician of Chinese Academy of Engineering and the female is a popular singer). The advertisement demonstrates the number of Chinese population exposed to second-hand smoking and the mortality attributed to the diseases caused by second-hand smoking with two celebrities present alternately to call on people to refuse second-hand smoking with the “say-no” gesture. Following the same analytical procedure, ELAN was used to annotate the video clips into four tiers, i.e. the narratives of male actor, the narratives of female actor, the scenario and captions. The narratives and captions are foregrounded and highlighted in the advertisement with nearly all the valid information loaded, while the mild music track and the scenario in the advertisement are both backgrounded with little effective information delivered connected with tobacco-control. This advertisement video adopts the eliteness framework to highlight the appealingness of celebrity with the application a lower and frontal camera angle to indicate the high status, and a gradual close and eye-level lens to focus on the gestures (images output shown in figure 3). Because of the application of eliteness framework and the virtual scenario, C3 presents a strong sense of alienation which contradicts to the content theme of second-hand smoking refusal in daily life, and it is difficult for the audience to combine their daily life with the advertising content which may lead to the deficiency of interactiveness.
Findings and Discussion

In this study, 33 pieces of tobacco-control public health video advertisements published in Australia and China in the recent decades are analyzed and compared from the perspectives of content themes, high-frequency lexis, scenarios and actors, among which 2 pieces of advertisements were subjected to multimodal discourse analysis and comparison. The research findings are summarized as follows. First, the different concerns on tobacco-control video advertisements demonstrate that Australia and China have adopted different approaches to control tobacco consumption, Australia focuses primarily on discouraging smokers from smoking by convincing the health damage ascribed to tobacco products, while China majorly concerns on the moral criticism of second-hand smoking. Second, although Australian and Chinese tobacco-control video advertisements both show high frequencies in using lexis related to tobacco products and smoking behaviors, the lexis used in the Australian advertisements are more concrete and strong, while the lexis used in the Chinese advertisements are more abstract and neutral when demonstrating the health damage which may lead to the weakness of warning function. Third, in terms of advertising scenarios and actors, Australian advertisements are more visually impactful with distressing hospital scenes, miserable patients, and the experiment of organ dissections, which assist the communicative function of smoking discouragement. The actors appeared in the advertisements are common people which is more likely to trigger resonance between advertisements and recipients. On contrast, the visual presentations in the Chinese advertisement are less impactful that the actors are healthy-looking, and the most common scenarios are home and virtual scenes. Moreover, the frequent appearance of celebrities and the
constructed eliteness framework may lead to a weak resonance between the advertisements and the general public recipients. In a word, Australian advertisements are more straightforward, targeted and explicit whereas the Chinese advertisements are feeble, abstract and implicit in communicating the goal of tobacco control.

Tobacco product usually bear significant social functions in the Chinese society that plays important role in festivals, ceremonies, and usually is exploited as instrument for communication, especially in male-smoker groups. Cigarettes sharing and gifting, especially luxury cigarettes, is a social manner in China that the giver may be rewarded with social approbation and potential resources, which significantly promote tobacco consumption and smoking behaviors. This ingrained social phenomenon of cigarette sharing and gifting is difficult to shift since it is more than an individual choice. As the research findings suggest, second-hand smoking is in severe situations in the Chinese society, however, it is recommended that a more cultural-targeted communication strategy should be taken into consideration by communication professionals and advertising designers. For instance, appropriate examples are found in some advertising slogans—“cigarettes gifting are diseases gifting”, and “you are gifting respiratory diseases along with the cigarettes to your family”.

Conclusion

This is a cross-cultural comparative study on tobacco-control video advertisements published in Australia and China in the recent decades. This study applies corpus linguistic techniques and conducts multimodal discourse analysis on the video advertisements. It is concluded that Australian and Chinese tobacco-control video advertisements have adopted significantly different strategies to communicate the purpose of smoking discouragement that Australian advertisements had better achievements in health communication, while the Chinese counterparts should shift the focus to smoking cessation which is more fundamental, and consider cultural-oriented communication strategies to increase the effectiveness of advertising.

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