

Creative mid-roll advertising or In-video overlay advertising?  
The effects of two emerging ad types in Chinese TV series.

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A Thesis

in

John Molson School of Business

Presented in Partial Fulfillment of the Requirements

for the Degree of Master of Science in Administration (Marketing) at

Concordia University

Montreal, Quebec, Canada

February 2020

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**CONCORDIA UNIVERSITY**

**School of Graduate Studies**

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**Master of Science in Administration (Marketing)**

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Date 6<sup>th</sup> March 2020

## **Abstract**

Creative mid-roll advertising or In-video overlay advertising?

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Yuxin Wang

Rapid development of online advertising has made advertisers and marketers look at the TV series industry in China. Nowadays, advertisers and marketers are trying new and creative tactics of advertising in Chinese TV series. This study aims to compare these two types of advertising (creative mid-roll and overlay advertising) at intrusiveness levels and seeks to better understand the effects of two creative types of advertising in Chinese contexts; precisely to understand their effects on viewers' attitudes toward advertising and brands and understand the different effects of advertising between introvert viewers and extrovert viewers and the mediation effect of irritation in influencing the perceived intrusiveness and attitude toward the ad and brand. Results indicate that different from the traditional video and text advertising difference, creative mid-roll advertising and in-video overlay advertising show no difference in intrusiveness levels. In addition, introvert people would perceive higher intrusiveness than extrovert people when people watch advertisements. Mediation effect of irritation is also confirmed in the current study which is partially mediated the relationship between intrusiveness and attitude toward the ad and the brand. When it comes to the managerial implications, the study suggests that in-video overlay advertising is more acceptable for general people so that it should be more considered for the Chinese TV series. Another implication is that advertisers should have awareness of marketing etiquette. They should be more concentrated on customer experience, respecting customers, and protecting customers' rights.

**Keyword:** creative mid-roll advertising; in-video overlay advertising; perceived intrusiveness; irritation; attitude toward the ad; attitude toward the brand.

## **Acknowledgements**

First and foremost, I would like to thank my supervisor, Dr. Michel Laroche, for helping me, guiding me, and supporting me from the beginning to the final step of this thesis research.

Without his help, I could not figure out the problems during the process of thesis development, and I could not finish my thesis. He helped me with his passion and patience. I am so grateful for his professional ethics and moved by his good personality. I am also thankful to Dr. Michele Paulin for giving me suggestions and prompt feedback for my thesis topic and thesis model.

I also want to thank Rong Li for her help, guidance, and psychological support during the hard time of writing the thesis. Her professional knowledge and insights inspired me a lot and offered me the great help with my research model and experiment. Without her help, I could not finish my thesis on schedule as expected.

Last, I would like to thank all those who supported and helped me during the process of completing this research. I also would like to offer my regards to my dear parents and all friends in Montreal and China.

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## 1. Introduction

More and more TV series in China are played on online video platforms. The reason is that the State Administration of Radio, Film and Television of China has imposed a ban on advertising in TV series, both video and pop-up advertising, on TV. Therefore, online video platforms have been a site for both TV series and online advertising.

Chinese online video platforms are trying new and creative tactics of advertising. In recent years, there have been two main and popular advertising tactics in Chinese TV series. One is called “Creative mid-roll advertising” (Picture A.1), which is named by the news and the industry. The other is “in-video overlay advertising” (Picture A.2), which is also named “jiggling logos” by the news. In the creative mid-roll advertising, the characters from the TV series also appear in the advertisements. Creative mid-roll advertising has the same characters and sites than the TV series. For example, there is a mid-roll advertisement for Coke Cola in a Chinese TV series set in a long-ago dynasty. The scene of this advertisement is an ancient character holding a modern-day Coke bottle. It is a clever and creative way to show brand content to people who are not expected to watch an advertisement in the middle of a TV series. Different from traditional mid-roll advertisements, creative mid-roll advertising is enjoyed by people. The reason is advertising congruence to program content and the creativity of advertisement. This creative mid-roll advertising seems like a companion piece to the TV series. Managers of Chinese online video platforms hope that this tactic can catch people off guard and make them enjoy the advertisement.

In-video overlay advertising (jiggling logos) is also a kind of online advertising in TV series. It pops into the corner or bottom of the screen in the TV series with brand name and content, just like traditional overlay advertising. However, the difference is that the content in in-video overlay advertising (jiggling logos) has high relevance to that in TV series, such as actor’s lines and the story line. For example, in Picture A.2, the program content is that a concubine is clever and beautiful, and the emperor loves her a lot. The advertising is created by a brand called “Mogujie” which is a fashion & beauty brand. The content of this advertisement is that: “learn how to outfit with concubine, the emperor will love you a lot”. It makes people impressed with brands through

integrations with program content and interesting words in the content. These two creative advertisements seem to be less intrusive than traditional in-stream advertising and overlay advertising due to the brand integration and humor content. With the development of these creative advertisements in TV series, people have different perspectives on them and on the TV series. Therefore, the goal in this report is to figure out the effects of these two types of advertising on people's attitudes toward TV program content.

Prior studies have suggested that in-stream video can interrupt people's online viewing experience (Li & Lo, 2015). Among three types of in-stream advertisings (pre-roll/mid-roll/post-roll), mid-roll video advertising interferes with viewers' attention more than the other two types of advertising (Ljubojević, Vasković & Starčević, 2013). Such interruption is likely to lead to an intrusiveness feeling in the viewers (Li & Lo, 2015). As a kind of pop-up advertising, in-video overlay advertising also interrupts viewers' attention to program content (Mei, Guo, Hua, & Liu, 2010). Pop-up advertisements can shift consumer attitudes to the host site in a negative direction (McCoy et al., 2008). Most research focused on in-stream video ads and in-video overlay ads separately, but few studies compared video and overlay advertising and focused on the creative tactics in Chinese TV series contexts. These new tactics are both relevant to the program content. They were not analyzed and evaluated before. Li, Edwards & Lee (2002) said "ads will first be evaluated on the basis of the degree to which they interrupt the goals of viewers." However, which type of advertising has more intrusiveness, and comparison between these two advertising types are not clear. This study will bridge the gap of comparing these two types of advertising (creative mid-roll and overlay advertising) and seeks to better understand the effects of two creative types of advertising in Chinese contexts; precisely to understand their effects on viewers' attitudes toward advertising and brands and understand the different effects of advertising between introvert viewers and extrovert viewers and give managerial implications for marketing practitioners in the Chinese markets.

## **2. Literature Review**

### **2.1 Ad Intrusiveness**

When researching advertisements, ad intrusiveness is an important element needed to be evaluated, whether content, timing, placement, and other characteristics will interrupt the goals of consumers, and then lead to consumer perceived intrusiveness. Perceived intrusiveness has been researched under different contexts in marketing. Psychological reactance theory has been used to explain freedom threatening incidents in potential degree (Clee & Wicklund, 1980).

Psychological reactance theory states that when something or someone threaten user's freedom, the user will have a psychological reactance in answer to the threat and desire to rebuild their freedom (Brehm & Brehm, 1981). One kind of conditions is that users are driven to view advertisements without their consent (Edwards et al., 2002). In the condition that users are exposed to advertisement when they enjoy the content of a medium, they will be more likely to avoid and reject it. Thus, users would tend to avoid all advertisements in the medium (Bhattacharjee, 2010). In the context of online video, when viewers enjoy the freedom to watch their videos, an overlay advertisement popping up or a mid-roll advertisement in video could threaten their freedom of watching the video. Both these types of advertisements will distract viewers from focusing on the video content. Perceived intrusiveness is included in effects of reactance (Goodrich, Schiller, & Galletta, 2015). It will lead to negative attitudes from viewers to both advertisement and brand, so that ad perceived intrusiveness can have impacts on marketing outcomes (MacKenzie & Lutz, 1989; Goodrich, Schiller, & Galletta, 2015).

Rejón-Guardia and Martínez-López (2014) also investigated perceived intrusiveness of online advertising. They found that when there is little time for an individual to finish a task in a medium, his or her perceived intrusiveness will be enhanced. Thus, users of a medium have to avoid advertisements when they feel perceived intrusiveness. In general, perceived intrusiveness is the materialization of a mechanism that can reflect on the emotional reactions of users when they watch advertisements in a medium that may lead them to advertising evasion (Edwards et al., 2002). Rejón-Guardia and Martínez-López (2014) also defined perceived intrusiveness based

on the concept of interference with private life (Nelson & Teeter, 2001; Sipior & Ward, 1995). They defined perceived intrusiveness of advertising as “the degree to which the non-desired marketing interferes with an individual’s cognitive process and task completion; also, the degree of interference with the content of the medium being viewed.” They also mentioned that ad perceived intrusiveness is related to content of the communication media (Ha, 1996). Ha and McCann (2008) mentioned that if the user’s navigation purpose is information, entertainment, purchasing, and exploration, the intrusiveness will be perceived by users when they are interrupted by advertisements. TV series is a kind of entertainment objective for most audiences. When the audiences watch the online TV series, they would feel the perception of intrusion if there is an advertisement interrupting them.

Ad intrusiveness is also perceived when advertisements influence the people’s goals (Li, Edwards, & Lee, 2002). Ads can interrupt the search for programming content and block access to programming content. In addition, ads can interrupt the viewing of programming content and viewers will be affected by this interruption. Finally, ads may completely interrupt the connection between viewers and programming content (Li, Edwards, & Lee, 2002). Li, Edwards, & Lee (2002) defined intrusiveness as “a perception or psychological consequence that occurs when an audience’s cognitive processes are interrupted” in advertisement contexts. They also described intrusiveness as the mechanism by which ads cause negative emotional reactions. Intrusiveness can be perceived in different contexts, which depend on when and where the interference takes place (Li, Edwards, & Lee, 2002). It can be perceived when viewers see a pop-up ad, or see a mid-roll ad (commercial) during TV programs. It is context free (Li, Edwards, & Lee, 2002). In the context of Chinese TV series, we define perceived intrusiveness as the degree of online viewers being interfered by the creative mid-roll advertisement and in-video overlay advertisement.

## **2.2 Ad Irritation**

Advertising and its public perceptions have been studied for many years, and there are

various findings to show that attitudes toward advertising, which is a kind of institution, are more beneficial (Bauer & Greyser, 1968; Ducoffe 1996; Sandage & Leckenby, 1980). There are not only negative impacts, but also positive impacts on the advertising industry. Whereas certain advertisements which are different from advertising as an institution would give offense or irritate people (Aaker & Bruzzone, 1985; Bauer & Greyser, 1968; Wells, Leavitt, & McConville, 1971).

If advertisements are perceived as useful and valuable, they would be perceived as less irritable (Pasadeos, 1990). Advertising value represents the worth of an advertisement to consumers. Useful and valuable advertisements are advertisements that are informative and recreational for consumers, and informativeness and recreational value are both important for consumers and advertisers and their communications (Ducoffe, 1995, 1996).

An advertisement which is irritating is perceived as unpleasant and brings impatience to users (Aaker & Bruzzone, 1985). Irritating advertisements are more offensive than negative (Aaker & Bruzzone, 1985). Most advertisements are perceived as irritating and offensive, often because of their content (Bauer & Greyser, 1968). In addition, Li, Edwards, and Lee (2002) figured out the three classifications which are advertising content, execution and ad placement. If an advertisement has poor content that is unreal, makes viewers feel hurt or confused, it would create irritation (Bauer & Greyser, 1968). Besides, if an advertisement is not executed successfully such as it is too long, too big, or too loud, viewers would feel irritation from that ad (Aaker & Bruzzone 1985; Bauer & Greyser, 1968). In this case, advertisements stimulate viewers obsessively. Moreover, ad location and frequency can also affect viewers perception of an ad. Viewers are more likely to feel irritated when an advertisement appears too many times and they intend to avoid it (Bauer & Greyser, 1968). When there are too many advertisements appearing in too small a space, ads may result in feelings of irritation (Morimoto & Macias 2009). In general, when advertisements are overstimulating viewers, they would feel irritated by these advertisements and this may result in ad irritation and ad avoidance.

Perceived intrusiveness and ad irritation are different. Although perceived intrusiveness is

considered as the cognitive process when users are aware the ad is disconcerting, it is different from the negative reactions resulting from the ad (Li, Edwards, & Lee, 2002). As the current research mentioned before, perceived intrusiveness is the materialization of a mechanism that can reflect on the emotional reactions of consumers, but not the emotional reactions themselves. Ad irritation is a kind of negative emotion and reactions that intrusiveness reflects (Li, Edwards, & Lee, 2002). A few studies have found that the feeling of irritation is the consequences of perceived intrusiveness (Edwards et al., 2002; Morimoto & Chang, 2006; Li et al., 2002). There is a correlation between ad intrusiveness and ad irritation (Rejón-Guardia & Martínez-López, 2014). The feeling of irritation is more likely to appear when an ad is perceived as intrusive (Li, Edwards, & Lee, 2002). Irritation is a kind of negative emotional reaction of consumers facing an intrusive ad. To be specific, it would be irritating when viewers have to close an ad when they are watching a TV series or reading the content of a website. It would be more irritating when the users cannot close an ad so that they will be forced to watch the ad. At the same time, it is not convenient for users and they would be distracted by that ad (Edwards et al., 2002). Irritation has no contribution to the ad value and the ad itself, but to negative emotional reactions of consumer toward the ads (Edwards et al., 2002; Wehmeyer, 2007). In the context of Chinese TV series, viewers may have feelings of irritation when they watch the intrusive ads that they cannot close while watching a TV series.

### **2.3 Ad Formats**

The study of ad intrusiveness is always related to ad formats such as pop-ups and spam (Edwards et al., 2002; Fuxi et al., 2009; Li et al., 2002; McCoy et al., 2008; Morimoto & Macias, 2009; Truong & Simmons, 2010; Ying et al., 2009). Online advertising has changed drastically over the decades, from simple advertising such as electronic mailing advertising (Li & Leckenby, 2007), pop-up advertising, banner ads to various advertising such as interactive ads and visible 3D ads (Faber et al., 2004). Advertisers have been looking for the effective way to promote their brands and products (Becker-Olsen, 2003). The most famous method is product and brand

placement (Van Reijmersdal, Neijens, & Smit, 2007). Nowadays, there is a wide variety of advertising tactics for online ads, from in-stream video advertising to overlay text advertising (Hua, Mei, & Li, 2008; Mccoy, Everard, Polak, & Galletta, 2008). The content of product or brand would be integrated with an ad shown to consumers, which is impressive and memorable. Audience are more likely to focus on the ad format than on the commercial messages (Van Reijmersdal et al., 2005), which proves that ad format has an impact on audience reactions.

As one of the highly visible formats of online advertising, video advertising is defined by Mei, Hua, and Li (2007) as “a video advertisement clip provided by advertisers that can be inserted into or associated with a source video.” This kind of advertising can be inserted into TV programs, animations, or text. In-stream video ads are often classified as part of a video stream (Goldfarb & Tucker, 2011). As a kind of video advertising, in-stream video advertising can be shown before the program (pre-roll), during the program (mid-roll), and after the program (post-roll) (Li & Lo, 2015). It has two formats: traditional and skippable (Pashkevich et al., 2012). Mei, Hua and Li (2007) believe that ads should be inserted in an appropriate position in the video stream rather than only before and after the video streams. Mei, Guo, Hua, & Liu (2010) stated that mid-roll video advertising carries out a good balance between user experience and ad impression so that mid-roll video advertising has achieved an extensive consumer attention. In addition, mid-roll video ads are more likely to raise brand name recognition than pre-roll and post-roll video ads (Li & Lo, 2015). However, Li and Lo (2015) also stated that in-stream video can interrupt people’s online viewing experiences. They use an intrusive exposure format to interrupt a video (Chatterjee, 2008). In-stream video ads are like traditional advertisements in TV programs, but in-stream video ads are more likely to be intrusive to users by interrupting the program story (Mei, Guo, Hua, & Liu, 2010). For creative mid-roll ad in Chinese TV series, it will stop the TV program and the content of the ad has a closely connection with the series content. Although it interrupts the program story, it would be more likely to be less intrusive than traditional in-stream video.

Pop-up ads are defined as appearing in a new window above the existing window (Goldfarb

& Tucker, 2011). As a kind of pop-up ads, in-video overlay ads often appear in the bottom or the corner of the program with brand logo and slogan. It will not stop the TV program and will lead to less ad interruption to viewers. In-video overlay covers video content with an overlay layer to display an advertisement, which is the most effective way in accordance for “user attention” and “emotional engagement” (Media post). This is a tactic developed by online platform advertisers to make viewers unable to avoid the ads (Mccoy, Everard, Polak, & Galletta, 2007). It can lead to the high levels of purchase intention, ads recall and ad perception (Chatterjee, 2008). It is also regarded as a prominent format (Becker-Olsen, 2003; Hyland, 2000). Compared with other video ad formats such as pre-roll, mid-roll and post-roll advertisements, in-video overlay advertisements do not interrupt viewers watching videos. The video is still playing while the overlay ad is shown in the bottom or corner of the screen (Cheung & Ho, 2017). However, other research reveal that viewers become interrupted by pop-up ads (overlaid ads) and attempt to avoid this kind of advertising (Mei, Guo, Hua, & Liu, 2010). For example, a research shows that compared with other formats ads on YouTube, overlay ads have more negative responses. It only has more positive responses than bumper ads (Tandyonomanu, 2018). In the context of Chinese TV series, same as the creative mid-roll ad, content of in video overlay ad is also related to program content, which would be less intrusive than traditional overlay ads.

In-stream video ads are more likely to last longer compared to pop-up ads (Li & Lo, 2015). In-stream video ads interrupt viewers by stopping program content so that it is difficult for viewers to ignore the in-stream video ads (Li & Lo, 2015). Both in-stream video ads and pop-up ads interrupt viewers and affect their viewing experiences. Logically, programs stop being played when the mid-roll video ads come out. Although in-video overlay ads do not stop and block the show, most of them covered a part of screen, such as subtitles or face of the character, which will decrease the effectiveness of the ad and user experiences and impressions of the ad. However, to the best of our knowledge, few researchers compare them at the intrusiveness levels. Which type has the higher intrusiveness, whether ad format or interruption leading to higher intrusiveness need to be further analyzed. Thus, we will figure out interruption level and intrusiveness between



mid-roll video ads and in-video overlay ads in the current paper.

### ***2.3.1 Ad formats in Chinese TV series***

Advertising placement is more and more diversified in Chinese TV series. As one of the TV program formats that viewers like, it also attracts advertisers. TV series can make the audience get visual pleasure and psychological compensation in virtual reality. It is not easy for the audience to reject the soft advertisement implanted in TV series. The marriage of advertisement and TV series is a win-win situation for both parties. There are two main patterns of product placement in Chinese TV series. First is the traditional pattern of advertising that includes prop placement, line placement, scene placement, and theme placement. Prop placement is the method of presenting the product directly as a prop in a TV series. Prop implantation is the most primitive and common practice. In the TV series, prop implants are almost everywhere, such as clothing, mobile phones, cars which can all be merchants implanted advertising. This promotional way will not only expand the brand popularity, but also make use of the characters in the film to position different products. Line placement is the embedding of advertising information into lines in appropriate drama scenarios. The implantation of lines is a relatively obvious one. This kind of advertisement placement is easy to arouse the audience's antipathy, because the audience is sensitive to the appearance of this kind of advertisement in the TV series. If the timing is wrong or too frequent, it will often backfire. Scene placement refers to a mode that combines the name and function of the product skillfully with the plot of film and TV series. In the movie "A world without thieves", The Great Wall lubricating oil advertising appears on a truck when the character drove the car and had a close call with the truck. Its slogan calls for people to reduce unnecessary friction and makes a positive advertisement for "Great Wall lubricating oil" at the same time. Product placement needs to combine product features with the theme of the film and forcing it will make people feel it was deliberate. Theme placement refers to the TV series specially shot for a certain brand, which integrates brand creation, brand tenet and brand concept into the TV series. This kind of placement does not deliberately promote products, but let the audience

understand the difference between enterprises and products through the ups and downs of the characters in the TV series (Zhang, 2011).

The second main pattern is the product placement in the new media age. Nowadays, audiences show more and more obvious centrifugal tendencies and reverse psychology to the explicit advertisement. Therefore, modes of placement are more and more affiliative and covert. There are two main types of advertising in this pattern: creative mid-roll advertising and in video overlay advertising, which are mainly analyzed in the current research. These two types of advertising only appear online. As we mentioned before, the product placement in the form of creative mid-roll advertising is different from the traditional mid-roll advertising directly inserted by advertising companies in the middle of the TV series. It is performed by actors in the program, who wear the same clothes, draw the same makeup, and complete the advertisement shooting in the same scene. And the advertising background is close to the story set, which puts the brand and story in deep integration, and better interprets the brand features and characteristics. It doesn't make the audience jump and abrupt. In addition, in video overlay advertising generally adopts the form of copywriting plus story, which presents the image of the brand or the product combined with bullet screen in the development process of the story with the appropriate relevant text on the screen. It attracts the attention of the audience with a relaxed and cheerful style and produces the emotional resonance with the audience to a certain degree (Gao, 2017).

## **2.4 Personality (Introvert/Extrovert)**

Differences in individual personality have been revealed to have impacts on peoples' conception and their processing strategy. Previous research has developed the scale to identify individual personality differences impacts on people preferences for esthetic features of fashion designs (Holbrook, 1986). Individuals with different personalities have also been suggested to have different reactions to advertising in different ways such as evaluation of advertising images, concrete visuals or abstract visuals (LaBarbera, Weingard, & Yorkston, 1998).

As one of the most important personality dimensions, introversion or extroversion has been recognized and explored by previous literature. Introverts and extroverts differ in several aspects,

such as behavior orientation, the values they hold, and attitudes toward the environment (Eysenck, 1967; Furnham, 1984; Marjoribanks, 1989). In addition, Eysenck (1977) also proposed that there is a different sense for introverts and extroverts to control their behavior outcomes. Avoiding costs is what introverted are motivated to do and gaining awards is what extroverts are motivated to do. Because of the motivational differences, it is easier for introverts to perceive things in a more negative intention, and for extroverts to perceive things in a more positive intention. It seems that personality plays an important role that influences how people interact with their environment. Thus, it is easier to see that introverts and extroverts will have different feelings and evaluations of advertising. Chang (2001) suggested that extrovert subjects will perceive advertising and brands in more positive ways than introverts. In addition, prior study also revealed that personality traits have a significant impact on online ad avoidance (Jin & Villegas, 2007). Mooradian (1996) stated that extraversion has the significant impacts on predicting feelings of advertising and consumer attitudes. Specifically, introverts and extroverts hold different attitudes toward advertising. Introverts are more likely to respond with less positive attitudes when experiencing ad-evoked mixed emotions (Orth, Malkewitz, & Bee, 2010). For different ad cues such as loudness of ad and interruption of ad, introverts and extroverts also have different attitudes (Cetola & Prinkey, 1986). Besides, Roccas et al. (2002) find that extroverts are easier to accept to novel experience and stimulation seeking and needs for cognition and information, which is an important element for effectiveness of advertising. In Chinese TV series context, there is no previous study focusing on the different perceptions of introvert and extrovert when they watch the advertising in TV series. The current research will study out.

## **2.5 Attitude toward Ad and Brand**

Attitude is how you express your feeling such as like or dislike. It can be negative, positive or neutral. The impact of consumer attitudes toward advertising on advertising effectiveness is a very important area for the ad industry. It is used to evaluate the effectiveness of ads. The attitude toward the ad could be damaged by the ad perceived intrusiveness (MacKenzie & Lutz, 1989).

Morimoto and Macias (2009) also stated that behaviors toward an ad can be affected by perceived intrusiveness directly. If a user feels that an ad is intrusive, it must be the situation that the ad interrupts the user and affects the user experiences during his or her navigation and this kind of interruption can lead to user negative attitudes (Rejón-Guardia & Martínez-López, 2014). In addition, irritation caused by perceived intrusiveness is also negative emotional reaction that consumers have toward advertisements (Rejón-Guardia & Martínez-López, 2014). In general, consumer attitudes toward advertising have been found to be negative in previous research. For example, before the 1970s, attitudes toward advertising has been found increasingly negative by Zanot (1981, 1984). However, some previous early research showed some positive results. For instance, Gallup (1959) found that a great number of participants showed their liking for advertisements and thought the ads were informative. There was also a research finding most people having favorable attitudes than unfavorable attitudes (Bauer & Greyser, 1968). In China, television advertising was an effective marketing tool and Chinese consumers focused more on informational content than entertainment features of ads in the 1980s (Zhao & Shen, 1995). After the 1970s, more studies found consumer negative attitudes toward advertising. TV advertising was misleading and bad by most respondents (Shavitt et al., 1999). Most findings in later studies also revealed similar results of attitudes toward advertising (Alwitt & Prabhaker, 1994; Mittal, 1994). Recent studies began to focus on attitudes toward advertising on different platforms. Six media (TV, radio, magazines, newspapers, Yellow Pages, and direct mail) were studied by Elliot and Speck (1998) and they found that the advertising related communication problems were highest in TV and magazines. In addition, television ads have the highest level of negative attitudes toward advertising than radio ads (Bogart, 1968).

As a new communication medium, the Internet has more and more advertisements and there is a great amount of research focusing on online advertising. Advertising is more likely to perform as perception and persuasion rather than commercials that interrupt and irritate consumers (Goodrich, Schiller, & Galletta, 2015). The content and form are important for online advertising. Advertisements can lead to irritation which will affects consumer attitudes toward to the ad

(Ducoffe, 1996). A main factor in ad attitude is relevance and meaningfulness of an ad. Ad attitude is affected by ad information, entertainment, and meaningfulness to a great degree, which would decrease negative attitude from consumers toward ads (Goodrich, Schiller, & Galletta, 2015). Interesting and informative ads have positive impacts on consumer attitudes toward the ad and the brand (Mitchell & Olson, 1981; Shimp, 1981). Previous TV research revealed the relationship between TV program and TV advertising (Alwitt & Prabhaker, 1992), which shows that this relationship is moderated by involvement of commercial which revealed the potential relationship between ad content and product and brand (Murry et al., 1992). Advertising could be more effective if advertising would be consistent with program. With the development of TV advertising in China, online TV advertising has changed a lot, as we mentioned in the section on ad formats in China. While paying attention to informational content, more and more audiences began to look at the format of advertising. Audiences have negative attitudes toward the traditional TV commercials that interrupt the audience's watching experiences of the drama series and force the product information to be conveyed in a one-way through visual symbols, auditory symbols, and so on (Pei, 2017). Nowadays, new formats of advertising in online TV series in China appear and the attitude toward them and brands will be analyzed in the current study.

### **3 Statements of Hypotheses**

As illustrated earlier, there are two main advertising types in Chinese TV series, namely creative mid-roll advertising and in-video overlay advertising. To the best of our knowledge, there is no previous study that compares the creative mid-roll ad and in-video overlay ad and figures out perceived intrusiveness and consumer attitudes toward these two advertising types in Chinese TV series. We reason that creative mid-roll ad is a kind of video mid-roll ad and it has similar features as mid-roll ad in TV series. Besides, creative in-video overlay ad also has similar features with overlay ads. Thus, we look at the impacts of video mid-roll ads and overlay ads and consumer attitudes toward these two types of advertising from previous literature. Goodrich, Schiller and Galletta (2015) studied the impacts of characteristics of online videos. They found that informative and humorous video advertisements were perceived as having less intrusiveness.

Luo, Jiang, and Yi (2012) also stated that a video advertisement would let consumers have deep memory of the advertisement and have more favorable attitudes toward the advertisement, and in-video overlay ads block partially the online video which prevent viewers from watching the complete content of online video and TV series (Cheung & Ho, 2017). However, previous literature also suggests that mid-roll ads stop and cover the whole video area that prevents viewers from watching the content of the video, which has the higher interruption level while in-video overlay advertisements only covers a part of screen of the video area and does not interrupt users watching video, which has the lower interruption level. Logically, overlay ads are less intrusive than mid-roll ads so that in Chinese TV series contexts we propose creative mid-roll ads have higher perceived intrusiveness. Therefore, we propose that creative mid-roll advertisements are perceived as more intrusive.

**H<sub>1</sub>: In Chinese TV series contexts, compared with in-video overlay advertisements, creative mid-roll advertisements will lead to more ad intrusiveness.**

As mentioned before, introverts and extroverts hold different feelings and attitudes toward advertising. Introverts tend to pay more attention to the negative side of things (Baer et al., 2016; Chang, 2001; Eysenck, 1977b). Advertising is perceived as negative by these consumers. It is logical and reasonable to think that perceived intrusiveness would be different between introverts and extroverts. That is, extroverts will have less perceived intrusiveness and more positive attitudes toward the ad. Therefore, we propose that compared with introverts, extroverts would perceive less intrusiveness than introverts of advertisements in Chinese TV series contexts.

**H<sub>2</sub>: In Chinese TV series contexts, compared with introvert consumers, extrovert consumers will perceive less ad intrusiveness of advertising.**

In addition, as reviewed previously, psychological reactance theories suggest that viewers

would feel uncomfortable and would like to reclaim their freedom and control when they are in a loss of freedom. When viewers are interrupted by advertisements, they are likely to either ignore the ad interruption or dispense with it to seek their freedom (Abernethy 1991; Clancey, 1994; Krugman & Johnson, 1991; Speck & Elliott, 1997). When an advertisement is considered intrusive, a negative reaction would appear which is called irritation. This negative reaction is more like a consequence of interrupting viewers from accomplishing their goal (Aaker & Bruzzone, 1985). There is also research that reveals the evidence of the relationship between ad perceived intrusiveness and ad irritation by Edwards, Li, and Lee (2002). Therefore, we propose that there is a direct positive relationship between ad perceived intrusiveness and ad irritation.

**H<sub>3</sub>: There is a direct positive relationship between ad perceived intrusiveness and ad irritation.**

As illustrated earlier, consumer attitudes toward ads would be negative if ads are perceived as intrusive. Previous literature suggests irritation affects attitude toward brand of advertising and advertising site, which is a negative relationship between ad irritation and attitude and so as consumer attitudes toward ads. Therefore, we propose that there will be a negative relationship between ad irritation and consumer attitudes toward ads and attitude toward brand.

**H<sub>4</sub>: There is a negative relationship between ad irritation and consumer attitudes toward ad.**

**H<sub>5</sub>: There is a negative relationship between ad irritation and consumer attitudes toward brand.**

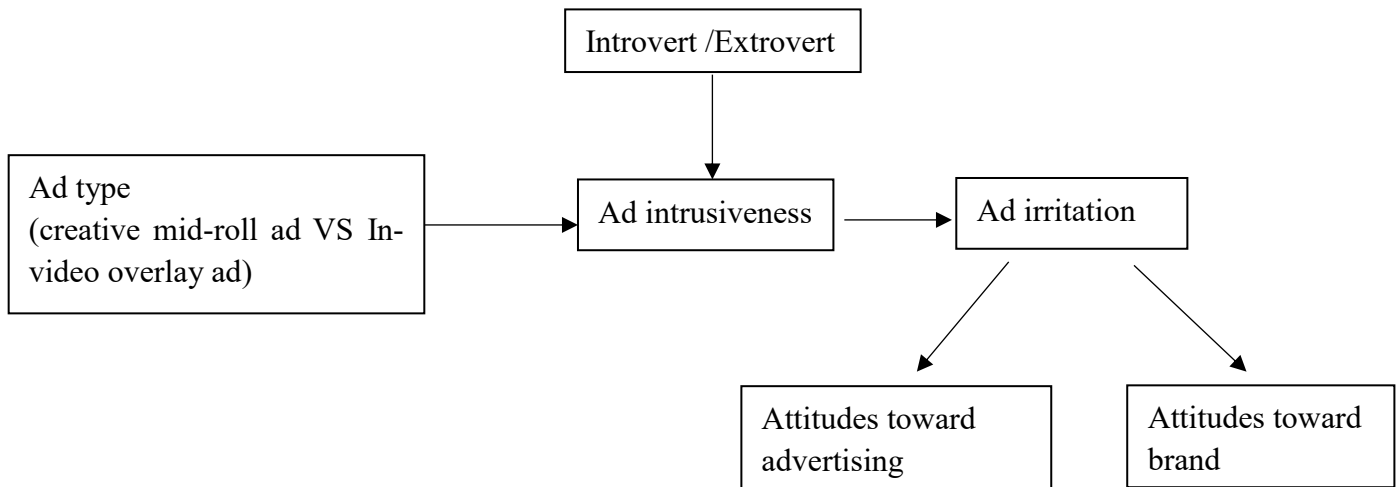
<b>Summary of Hypotheses</b>			
Creative mid-roll advertising VS In-video overlay advertising	There is no clear answer in previous research	H <sub>1</sub>	In Chinese TV series context, compared with in-video overlay advertisement, creative mid-roll advertisements will be perceived as having more intrusiveness
The effect of consumer personality (Introvert/extrovert)	Chang (2001) suggested that extrovert subjects will perceive advertising and brands in more positive way than introverts.	H <sub>2</sub>	In Chinese TV series context, compared with introvert consumers, extrovert consumers will perceive less ad intrusiveness of advertising.
Ad intrusiveness and ad irritation	Li, Edwards and Lee (2002): Ad irritation is a kind of negative emotions and reactions that intrusiveness reflects; The feeling of irritation is more likely to occur when an ad is perceived as intrusiveness.	H <sub>3</sub>	There is a direct positive relationship between ad perceived intrusiveness and ad irritation.
The relationship between ad irritation and consumer attitude toward ads and brand	Previous literature suggests that irritation affects attitude toward brand of advertising and advertising site, which is negative relationship between ad irritation and attitude and so as consumer attitudes toward ads.	H <sub>4</sub>	There is a negative relationship between ad irritation and consumer attitudes toward ad.
		H <sub>5</sub>	There is a negative relationship between ad irritation and consumer attitudes toward brand.

**Table 3.1: Summary of Hypotheses**

We develop a research model for the current study. From Figure 3.1, we propose that



creative mid-roll ad will be perceived as more intrusive in Chinese TV series and extrovert subjects will perceive less ad intrusiveness for these two types of ad compared with introverts. In addition, there is a direct positive relationship between ad perceived intrusiveness and ad irritation and as ad irritation increases, consumer attitudes toward ads become more negative in the condition of these two types of ads.



**Figure 3.1: Research Model**

## 4 Methodology

### 4.1 Study design

The current study used a randomized experiment with a between-subjects design. The key element of design featured a creative mid-roll video advertisement in the middle of a TV series with the same characters as in TV series and an in-video overlay advertisement appearing in the bottom or corner of the screen during playing TV series on a website. The research question seeks to understand the effects of the two types of ads. However, creative mid-roll ads and in-video overlay ads are in non-equivalent conditions. In order to compare them in equivalent conditions, there will be two elements to disentangle the effects of these two types of ads: ad format and interruption level. Ad format has two levels (video and overlay) and interruption also has two

levels (no interruption and interruption). Creative mid-roll video ad is a video ad with interruption. In-video overlay ad is an overlay ad without interruption. It is a good operationalization of constructs because the two elements can disentangle the effects of these two types of ads which are not equivalent and avoid the potential confounding variables. Four treatment conditions for two types of advertisings involved:

- creative mid-roll video ad that interrupts the show (video 1) (Picture A.1),
- in-video overlay ad that interrupts the show (overlay 1) (Picture A.2),
- creative mid-roll video without interrupting the show (video 2) (Picture A.3),
- in-video overlay ad without interrupting the show (overlay 2) (Picture A.4).

The first two conditions were two ad formats with interruption. Both video ad and overlay ad stopped the TV series and stayed on the full screen. The last two conditions were two ad formats without interruption. That is, both video ad and overlay ad played in the left corner of the screen while the program still played. The length of the main video and advertisements chosen for the current study was based on the length of typical in-video overlay advertisements in TV series which was four and half minutes and 20 seconds. The TV series clip chosen by the current study is an online TV series provided on a Chinese online video platform. The brand chosen by the current study is fictitious which is also a part of the selected online TV series clip. This is a brand of potato chips. Brand familiarity could not affect the reactions to ads significantly based on this fictitious ad. In addition, to avoid the effects of device that participants used to watch videos on video clip, participants were only allowed to use the PC/Laptop & Tablet devices in the experiment to watch videos. Moreover, all items of scales in questionnaire are translated from English to Chinese by professional translator in China to avoid the effect of misunderstanding on questionnaire of this study.

## **4.2 Procedure**

A total 240 Chinese people (45.8% male) participated the study via an online questionnaire through WeidiaoCha, an online survey company. They were all at least 18 years of age. All participants were randomly assigned to these four treatments. At the beginning of the study,

participants read a short paragraph about the instructions for the study and explanation of the video they would watch, and the research would like to know consumer's attitude toward the advertisement in TV series. After watching ads, participants were asked to complete the questionnaire of personality (introvert/extrovert), intrusiveness, irritation, attitude questions and demographic information.

### 4.3 Measures

Measurement scales were all adopted from previous research.

**Introvert/extrovert:** The revised Eysenck personality questionnaire short scale for Chinese (EPQ-RSC) (Qian et al., 2000) is used to classify subjects as introverted or extroverted. The scale contains 12 items. It is specialized to test personality for Chinese people and the 12 items in scale have been revised for Chinese people to test introvert or extrovert specially. For statistical analysis, researchers summed and averaged subjects' responses to the 12 items. Answer "yes" gets 1 score and "no" gets 0 score. The 7<sup>th</sup> question in the scale is reversed item, that is, answer "yes" gets 0 score and "no" gets 1 score. A high figure indicates the subject is more likely to be extroverted while a low figure indicates that the subject is introverted. Cronbach's reliability alpha was assessed to be satisfactory at .868 in the current research study.

**Ad intrusiveness:** For ad intrusiveness, it was measured by a seven-point Likert scale (Li *et al.*, 2002) with the following items: "When the ad was shown, I thought it was...distracting, disturbing, forced, interfering, intrusive, invasive, obtrusive." Cronbach's alpha is .945 for this scale in the current study.

**Ad irritation:** Ad irritation was measured using a seven-point Likert scale with five items: irritating, phony, ridiculous, stupid, and terrible, adopted by Li et al. (2002) originally from a study by Wells, Clark, and McConville (1971) (Cronbach's alpha = .906).

**Ad and Brand attitude:** Consumer attitudes toward ads and brand were measured using a 7-point semantic differential scales: good /bad, pleasant/unpleasant, and favorable /unfavorable (MacKenzie & Lutz, 1989) (Cronbach's alpha = .964).

## 5 Results

### 5.1 Measurement Model Results

The researcher conducted reliabilities for each construct first. Reliabilities for all constructs are shown in the measurement part which are all higher than .80, which are acceptable.

Based on the promising alpha scores, the factor analysis was conducted for further model validity that how well the proposed model fit the data in the current study. Table 5.1 shows the result of KMO and Bartlett's Test result. KMO value is .947 (Sig. = .000) which means that the data is adequate for factor analysis. The researcher conducted factor analysis for intrusiveness, irritation, attitude toward the ad, and attitude toward the brand. For the first factor analysis, from Table 5.2, "Irritating" and "Terrible" have higher factor loadings (.590 and .597) on intrusiveness construct not on irritation construct (.474 and .443). Therefore, "Irritating" and "Terrible" are removed from the scale for testing irritation construct in the current study. Then, reliability test was examined again for the irritation scale without two removed items. Its Cronbach's alpha is .910 which is higher than the acceptable level. Reliability was examined separately for attitude toward the ad (ATA) and attitude toward the brand (ATB), .943 and .949 respectively, which are also over the acceptable value for reliability test. The second factor analysis was conducted to get the final measurement items loadings to latent constructs. From Table 5.3, it shows the final item loadings to the latent construct and reliability value for each construct. Finally, there are 7 items for intrusiveness, 3 items for irritation, 3 items for attitude toward the ad and 3 items for attitude toward the brand. The final results would be used for the following hypothesis testing analysis.

<i>KMO and Bartlett's Test</i>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.947
Bartlett's Test of Sphericity	Approx. Chi-Square	4636.873
	df	153
	Sig.	.000

**Table 5.1: KMO Test Result**

<i>Measures</i>	<i>Intrusiveness</i>	<i>Attitude</i>	<i>Irritation</i>
Distracting	<b>.714</b>	.136	-.233
Disturbing	<b>.778</b>	.264	-.378
Forced	<b>.789</b>	.242	-.315
Interfering	<b>.824</b>	.273	-.309
Intrusive	<b>.835</b>	.171	-.186
Invasive	<b>.849</b>	.176	-.205
Obtrusive	<b>.746</b>	.345	-.224
Irritating	<b>.590</b>	.474	-.339
Phony	.241	<b>.863</b>	-.166
Ridiculous	.254	<b>.859</b>	-.238
Stupid	.358	<b>.808</b>	-.224
Terrible	<b>.597</b>	.443	-.430
ATA_Good	-.335	-.211	<b>.840</b>
ATA_Pleasant	-.302	-.222	<b>.840</b>
ATA_Favorable	-.339	-.140	<b>.824</b>
ATB_Good	-.205	-.194	<b>.870</b>
ATB_Pleasant	-.226	-.185	<b>.897</b>
ATB_Favorable	-.249	-.160	<b>.877</b>

Bold indicates the strongest loading of item to latent construct

**Table 5.2: Measurement Items Loadings to Latent Constructs**

<i>Construct</i>	<i>Item</i>	<i>Loadings</i>	<i>Reliability</i>
Intrusiveness	Distracting	.715	0.945
	Disturbing	.770	
	Forced	.789	
	Interfering	.823	
	Intrusive	.842	
	Invasive	.854	
	Obtrusive	.748	
Irritation	Phony	.860	0.910
	Ridiculous	.869	
	Stupid	.809	
Attitude toward the ad	ATA_Good	.845	0.943
	ATA_Pleasant	.844	
	ATA_Favorite	.826	
Attitude toward the Band	ATB_Good	.873	0.949
	ATB_Pleasant	.900	
	ATB_Favorite	.880	

**Table 5.3: Factor Analysis of Measurement Items**

## 5.2 Hypothesis Testing Results

There are a total of 240 valid questionnaires collected in the current study from WeidiaoCha platform. All of them are Chinese respondents and 45.8% male, 54.2% female. The specific demographics information of research participants is shown in Table 5.4.

		<i>Frequency</i>	<i>Percent</i>
Gender	Male	110	45.8
	Female	130	54.2
	Total	240	100.0
Age	18-24	87	36.3
	25-34	125	52.1
	35-44	24	10.0
	Above 45	4	1.7
	Total	240	100.0
Education	Less than high school	4	1.7
	High school graduate	12	5.0
	College	27	11.3
	Graduate degree	168	70.0
	Master's degree	27	11.3
	Doctorate	2	.8
	Total	240	100.0

**Table 5.4: Demographics of Research Participants**

### ***5.2.1 Effects of Two Different Advertising Types***

An analysis of variance (ANOVA) of two different advertising types in Chinese TV series context on intrusiveness was used to test  $H_1$ . There are four treatments for two different advertising types: creative mid-roll video ad that interrupts the show (video 1), in-video overlay ad that interrupts the show (overlay 1), creative mid-roll video without interrupting the show (video 2), and in-video overlay ad without interrupting the show (overlay 2). There are 60 participants in each treatment. Table 5.5 shows  $p = .869$  which is higher than .05, which means that the variance of each group is equal and can be used for further ANOVA analysis. Table 5.6 also shows that there is at least one group different from other groups ( $p=.000$ ).

<i>Test of Homogeneity of Variances</i>			
Intrusiveness			
Levene			
Statistic	df1	df2	Sig.
.239	3	236	.869

**Table 5.5: Test of Homogeneity of Variances**

<i>ANOVA</i>					
Intrusiveness					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	51.478	3	17.159	6.194	.000
Within Groups	653.816	236	2.770		
Total	705.294	239			

**Table 5.6: ANOVA Results**

As shown in Table 5.7 and Table 5.8, only in-video overlay ad that interrupts the show (overlay 1) has a different perceived intrusiveness than the other three conditions. We can get the results as the following. First, for overlay advertising, overlay 1 vs overlay 2, we know that overlay ad with higher interruption level has more perceived intrusiveness than overlay ad with no interruption. ( $p < .05$ ). For creative mid-roll video ad, video 1 vs video 2, there is no difference at different interruption level. ( $p > .05$ ). For ad at same interruption level, video 1 vs overlay 1, overlay ad has more intrusiveness than creative mid-roll ad ( $p < .05$ ). For video 2 vs overlay 2, no difference at same interruption level ( $p > .05$ )

From this result, we can only claim that interruption level has an effect on overlay ad and overlay ad has more intrusiveness than creative mid-roll ad at higher interruption levels. Overlay ad at higher interruption levels has the highest perceived intrusiveness. There is no evidence showing that two creative advertising at different interruption levels have different perceived intrusiveness. And there is no evidence showing that creative mid-roll advertising and in-video overlay advertising have different perceived intrusiveness at no interruption level.

Therefore,  $H_1$ , in Chinese TV series context, compared with in-video overlay



advertisements, creative mid-roll advertisements will lead to more ad intrusiveness, is not supported.

	<i>N</i>	<i>Intrusiveness Mean</i>
Video 1	60	3.8000
Video 2	60	3.9833
Overlay 1	60	4.8000
Overlay 2	60	3.5714
Total	240	4.0387

**Table 5.7: Mean Scores of Four Treatments**

*Multiple Comparisons*

Intrusiveness  
Tukey HSD

(I) advertising type	(J) advertising type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
video 1	video 2	-.18333	.30389	.931	-.9696	.6030
	overlay 1	-1.00000*	.30389	.006	-1.7863	-.2137
	overlay 2	.22857	.30389	.876	-.5577	1.0149
video 2	video 1	.18333	.30389	.931	-.6030	.9696
	overlay 1	-.81667*	.30389	.038	-1.6030	-.0304
	overlay 2	.41190	.30389	.529	-.3744	1.1982
overlay 1	video 1	1.00000*	.30389	<b>.006</b>	.2137	1.7863
	video 2	.81667*	.30389	<b>.038</b>	.0304	1.6030
	overlay 2	1.22857*	.30389	<b>.000</b>	.4423	2.0149
overlay 2	video 1	-.22857	.30389	.876	-1.0149	.5577
	video 2	-.41190	.30389	.529	-1.1982	.3744
	overlay 1	-1.22857*	.30389	.000	-2.0149	-.4423

\*. The mean difference is significant at the 0.05 level.

**Table 5.8: Effects of Two Advertising Types**

Two- way ANOVA was used to test the effects of personality on intrusiveness after introvert and extrovert participants watched the advertising. For statistical analysis, researchers summed and averaged subjects' responses to the 12 items. A low figure indicates that participants are more likely to be introverted and we marked these participants as "1". A high figure indicates that participants are more likely to be extroverted and we marked these participants as "2". There are two groups of people: introvert and extrovert in the experiment. As shown in Table 5.9, advertising type and personality (p\_group) have main effects on intrusiveness ( $p < .05$ ), but there is no interaction effect between advertising type and personality on perceived intrusiveness ( $p > .05$ ). That is, after watching creative mid-roll advertising and in-video overlay advertising, introvert participants perceived higher intrusiveness than extrovert perceived (Table 5.10). Therefore, H2, in Chinese TV series context, compared with introvert consumers, extrovert consumers will perceive less ad intrusiveness of advertising, is supported.

Due to the significant different mean score for creative mid-roll advertising for introvert and extrovert people, we also looked at the personality effects specifically in each advertising group. As shown in Figure 5.1, there is an obvious difference between introvert and extrovert participants for creative mid-roll advertising especially for the normal type of creative mid-roll advertising (video 1). However, there is no obvious difference for in-video overlay advertising.

Dependent Variable: Intrusiveness

Source	Type III Sum		Mean Square	F	Sig.
	of Squares	df			
Corrected Model	80.021 <sup>a</sup>	7	11.432	4.242	.000
Intercept	3937.362	1	3937.362	1460.912	.000
Advertising type	49.021	3	16.340	6.063	.001
P_group	18.766	1	18.766	6.963	.009
Advertising type * P_group	10.042	3	3.347	1.242	.295
Error	625.272	232	2.695		
Total	4619.939	240			
Corrected Total	705.294	239			

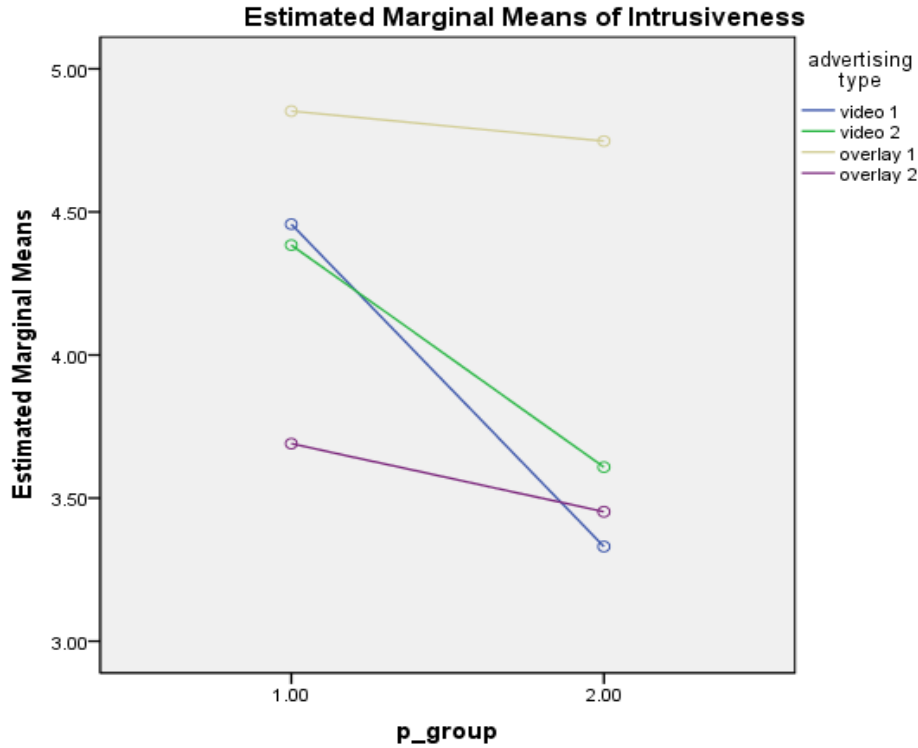
a. R Squared = .113 (Adjusted R Squared = .087)

**Table 5.9: Tests of Between-Subjects Effects**

Dependent Variable: Intrusiveness

<i>P_group</i>	<i>Mean</i>	<i>Std. Error</i>	<i>95% Confidence Interval</i>	
			<i>Lower Bound</i>	<i>Upper Bound</i>
1.00	4.346	.154	4.042	4.650
2.00	3.785	.147	3.496	4.073

**Table 5.10: Effects of Personality**



**Figure 5.1: Personality Effects in Different Advertising Groups**

### 5.2.2 Linear Regression

Linear regression was used to test the relationship between perceived intrusiveness, irritation, attitude toward the ad and attitude toward the brand. First, analysis of the relationship between perceived intrusiveness and irritation was conducted. As shown in Table 5.11, perceived intrusiveness was significantly related to irritation ( $b = .602, p < .05$ ). therefore, H<sub>3</sub>, there is a direct positive relationship between ad perceived intrusiveness and ad irritation, is supported.

In addition, as shown in Table 5.12, there is a negative relationship between irritation and attitude toward the ad ( $b = -.495, p < .05$ ). Through this result, H<sub>4</sub>, as ad irritation increases, consumers attitudes toward ads become more negative, is supported.

As shown in Table 5.13, irritation has negative effects on attitude toward the brand ( $b = -.463, p < .05$ ). Therefore, H<sub>5</sub>, as ad irritation increases, consumers attitudes toward brand become more negative, is supported in the current study.

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.625	.213		2.934	.004
	Intrusiveness	.564	.049	.602	11.618	.000

a. Dependent Variable: Irritation

**Table 5.11: Coefficients Between Intrusiveness and Irritation**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.166	.182		28.449	.000
	Irritation	-.481	.055	-.495	-8.799	.000

a. Dependent Variable: Attitude toward the ad

**Table 5.12: Coefficients Between Irritation and Attitude toward the ad**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.106	.179		28.468	.000
	Irritation	-.435	.054	-.463	-8.056	.000

a. Dependent Variable: Attitude toward the brand

**Table 5.13: Coefficients Between Irritation and Attitude toward the Brand**

The mediation effect of irritation is also tested through multiple linear regression. According to Baron & Kenny (1986), the test specifies into four steps: a) there is a significant relationship between independent variable (perceived intrusiveness) and mediator (irritation); b) there is a significant relationship between mediator (irritation) and dependent variable (attitude toward the ad and attitude toward the brand); c) there is a significant relationship between independent variable (perceived intrusiveness) and dependent variable (attitude toward the ad and attitude toward the brand); d) the significant effect of independent variable on dependent variable is reduced or disappeared after controlling the mediator, in this way, mediation effect can be proved.

When dependent variable is attitude toward the ad, as shown in the Table 5.14, there are significant effects between intrusiveness and attitude toward the ad ( $b = -.631, p < .05$ ), intrusiveness and irritation ( $b = .602, p < .05$ ), and irritation and attitude toward the ad ( $b = -.495, p < .05$ ). In addition, the significant effect of intrusiveness on attitude toward the ad is reduced ( $b = -.522$ ) when irritation is controlled but is still significant ( $p < .05$ ), which indicates that irritation acted as a partial mediation in affecting intrusiveness and attitude toward the ad.

When the dependent variable is attitude toward the brand, as shown in the Table 5.15, there are significant effects between intrusiveness and attitude toward the brand ( $b = -.556, p < .05$ ), intrusiveness and irritation ( $b = .602, p < .05$ ), and irritation and attitude toward the brand ( $b = -.463, p < .05$ ). In addition, the significant effect of intrusiveness on attitude toward the brand is reduced ( $b = -.435$ ) when irritation is controlled but is still significant ( $p < .05$ ), which indicates that irritation acted as a partial mediation in affecting intrusiveness and attitude toward the brand. Therefore, irritation has mediation effects in influencing perceived intrusiveness and attitude toward the ad and attitude toward the brand.

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	6.090	.201		30.295	.000
	Intrusiveness	-.575	.046	-.631	-12.549	.000
2	(Constant)	5.166	.182		28.449	.000
	Irritation	-.481	.055	-.495	-8.799	.000
3	(Constant)	6.201	.201		30.778	.000
	Intrusiveness	-.476	.056	-.522	-8.421	.000
	Irritation	-.176	.060	-.181	-2.929	.004

a. Dependent Variable: Attitude toward the ad

**Table 5.14: Mediation Effect of Irritation (DV: ATA)**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.823	.208		27.938	.000
	Intrusiveness	-.491	.048	-.556	-10.328	.000
2	(Constant)	5.106	.179		28.468	.000
	Irritation	-.435	.054	-.463	-8.056	.000
3	(Constant)	5.941	.209		28.480	.000
	Intrusiveness	-.384	.058	-.435	-6.568	.000
	Irritation	-.189	.062	-.201	-3.031	.003

a. Dependent Variable: Attitude toward the brand

**Table 5.15: Mediation Effect of Irritation (DV: ATB)**

## 6. Discussion

Previous studies mainly focused on the effects of length, position and other characteristics such as humor and informativeness of advertising on consumer perceived intrusiveness. However, few studies looked at the comparison between video and text advertising, especially mid-roll advertising and in-video overlay advertising in the Chinese TV series context. The current research investigated the comparison between creative mid-roll advertising and in-video overlay advertising at perceived intrusiveness levels, the difference in perceived intrusiveness between introvert and extrovert after they watched two types of advertising, and the relationship among perceived intrusiveness, irritation, attitude toward the ad, and attitude toward the brand. In this research, it first compared creative mid-roll advertising and in-video overlay advertising at perceived intrusiveness levels. Two different advertising types are divided into four treatments in equivalent conditions. We compared the four treatments two by two to figure out if consumer perceive higher intrusiveness in creative mid-roll advertising than in-video overlay advertising. Only in-video overlay advertising at higher interruption level has higher perceived intrusiveness than that at no interruption level. There is no difference between two creative mid-roll advertising at different interruption levels. In addition, at higher interruption levels, in-video overlay

advertising has higher perceived intrusiveness than creative mid-roll advertising, and they have no difference at no interruption level. In this research, creative mid-roll advertising and in-video overlay advertising have no difference in intrusiveness levels, but it is clear that interruption level has an effect on overlay ad and overlay ad has more intrusiveness than creative mid-roll ad at higher interruption levels. There is no evidence showing that two creative advertising at different interruption levels have different perceived intrusiveness. There is also no evidence showing that creative mid-roll advertising and in-video overlay advertising have different perceived intrusiveness at no interruption level. The current research failed to confirm the different intrusiveness between creative mid-roll advertising and in-video overlay advertising. The reasons might be that these two types of advertising have been two main advertising in China, consumers might have been used to watch these two types of advertising in Chinese TV series and there might be differences in other aspects but not in perceived intrusiveness. For most people, there is no difference for them when they watch these advertisements.

In the second part, we investigated the personality role in advertising industry. In Chinese TV series context, introvert consumers would perceive higher intrusiveness than extrovert consumer when they watch creative mid-roll advertising and in-video overlay advertising. The result is consistent with the previous literature, which suggested that introvert people have higher intrusiveness than extrovert people for advertisements. More specifically, this research compares the introvert people and extrovert people in two real conditions for two advertisements. For real creative mid-roll advertising condition, introvert consumers have higher intrusiveness than extrovert consumers. For real in-video overlay advertising condition, there is no different perceived intrusiveness between introvert consumers and extrovert consumers.

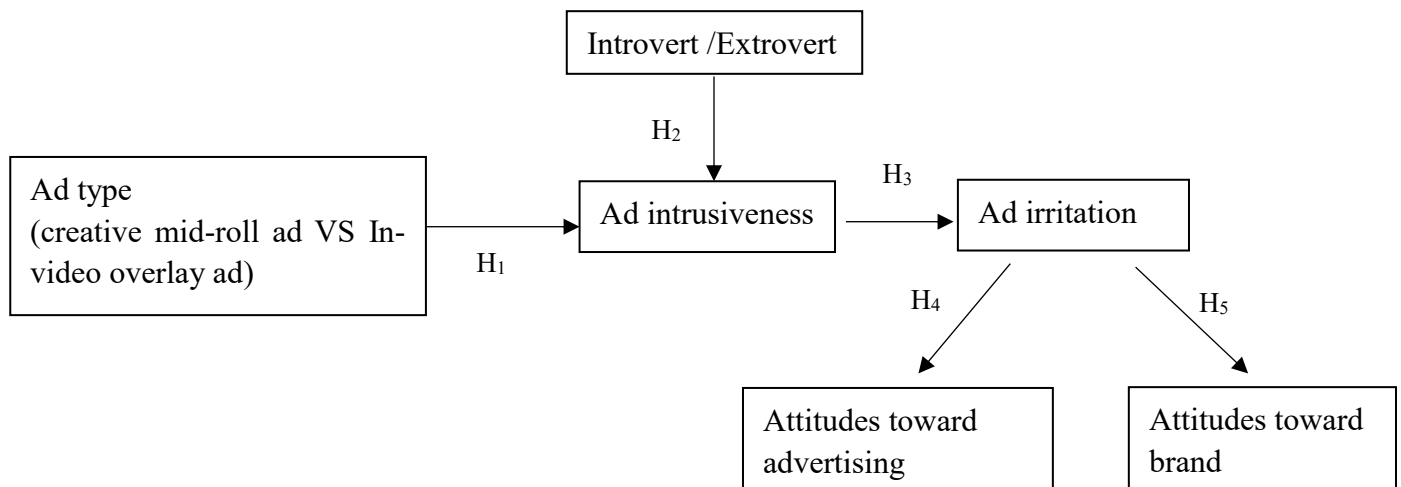
In the last part, we looked at the relationship between perceived intrusiveness, irritation and attitude toward the ad and brand. We found that there is a significant positive relationship between intrusiveness and irritation in the Chinese TV series context, which is consistent with the results in the previous literature. We also found that irritation has negative effect on attitude toward the ad and attitude toward the brand. Most previous literature focus on the relationship



between irritation and attitude toward the site and purchase intention. Therefore, in this research, we looked at the relationship between irritation and attitude toward the ad and attitude toward brand and investigated the mediating effect of irritation. Partial mediation of irritation was confirmed in this research.

To sum up, the current research focused on the creative mid-roll advertising in Chinese TV series context, and differences between introvert people and extrovert people when they watched advertising and found that there is no difference between these two popular advertising types in China at perceived intrusiveness level. The results also confirm that introvert people would perceive higher intrusiveness to some extent. More specially, introvert people perceive higher intrusiveness in creative mid-roll advertising but not in in-video overlay advertising. We can claim which type of advertising can be acceptable both for introvert and extrovert people. Finally, we confirm the mediation effect of irritation in influencing intrusiveness and attitude toward the ad and the brand.

The results of hypothesis testing are shown in Figure 6.1 and Table 6.1.



**Figure 6.1: Summary of Hypotheses for Research Model**

<b>Hypotheses</b>				<b>Supported or Rejected</b>
Creative mid-roll advertising VS In-video overlay advertising	There is no clear answer in previous research	H <sub>1</sub>	In Chinese TV series context, compared with in-video overlay advertisement, creative mid-roll advertisements will be perceived as having more intrusiveness	Rejected
The effect of consumer personality (Introvert/extrovert)	Chang (2001) suggested that extrovert subjects will perceive advertising and brands in more positive way than introverts.	H <sub>2</sub>	In Chinese TV series context, compared with introvert consumers, extrovert consumers will perceive less ad intrusiveness of advertising	Supported
Ad intrusiveness and ad irritation	Li, Edwards and Lee (2002): Ad irritation is a kind of negative emotions and reactions that intrusiveness reflects; The feeling of irritation is more likely to occur when an ad is perceived as intrusiveness.	H <sub>3</sub>	There is a direct positive relationship between ad perceived intrusiveness and ad irritation.	Supported
The relationship between ad irritation and consumer attitude toward ads and brand	Previous literature suggests that irritation affects attitude toward brand of advertising and advertising site, which is negative relationship between ad irritation and attitude and so as consumer attitudes toward ads.	H <sub>4</sub>	There is a negative relationship between ad irritation and consumer attitudes toward ad.	Supported
		H <sub>5</sub>	There is a negative relationship between ad irritation and consumer attitudes toward brand.	Supported

**Table 6.1: Summary of Results**

## 7. Managerial Implications

There are several managerial implications offered by the current study. First of all, although there is no obvious difference between creative mid-roll advertising and in-video overlay advertising in Chinese TV series context, the result to some extent showed that in-video overlay advertising is not suitable for covering the whole screen that viewers would have the highest perceived intrusiveness when they watch the overlay ad covering the whole screen. When they are both covering the whole screen, creative mid-roll advertising is more suitable than in-video overlay advertising. Logically, video advertising would have higher intrusiveness than text advertising because it stops the TV series and forced the viewers to see the content of the advertising. However, in the Chinese TV series context, people do not perceive higher intrusiveness when they watch the video advertising. Advertisers and practitioners in industry do not need to pay much attention to the type of the advertising in the Chinese TV series to some extent, they can focus on how the content of advertising is related to the TV series content, which could increase the delights of ad. They can also focus on the most efficient and profitable advertising in Chinese TV series because the types of advertising make no difference to audiences.

In addition, most people are divided into two kinds of personalities, introvert and extrovert. In this research, we found that introvert people perceive higher intrusiveness for advertising in Chinese TV series context, especially for creative mid-roll advertising. There are no differences of introvert and extrovert people for in-video overlay advertising. Obviously, it is hard to distinguish whether the audience is introverted or extroverted so that it is risky to put creative mid-roll advertising too much in the Chinese TV series. Therefore, in-video overlay advertising is more acceptable for general audience than creative mid-roll advertising. Based on the lower cost of the in-video overlay advertising and the extent of audience acceptance, it could be more considered by the advertisers and practitioners in the Chinese TV series industry. In addition, higher intrusiveness can increase the higher irritation and then the negative attitude toward the ad

and brand, in-video overlay ad could be a better choice to avoid the negative attitudes from audience than creative mid-roll advertising to some extent.

Last, awareness of marketing etiquette for business people should be necessary and important, especially in the advertising industry. Most Chinese advertisers are not limited to focus on the traditional advertising in TV series anymore, such as product placement and pre-roll/mid roll advertising. They are trying to make advertising more creative and interactive and trying to reduce the antipathy from consumers so that creative mid-roll ad and in-video overlay ad are generated. These two types of ads could increase the delights of advertising and give consumers deep impressions, which could be more impressive than traditional advertising. However, even though advertisers consider the creativity and interaction of advertising, it can also affect the consumer experience. On the one hand, since the advertising appears in the middle of the TV series, it will attract the attention from consumers, which would influence viewing experience of consumers and the content of TV series. On the other hand, for Chinese online video platforms, if consumers purchase the membership on the platform, they cannot watch the advertising anymore. However, because of the presence of these two new advertising types, consumers who are members of the platform will also be forced to watch the advertising in TV series, which violates the regulations of the platform and also the rights of consumers to some extent. It has been a problem in the advertising industry in Chinese TV series. Therefore, advertisers should have an awareness of marketing etiquette. They should be more concentrated on customer experience, respect customers, and protect customers' rights. In addition, considering the customer experiences should not only be an emphasis for Chinese TV series industry, but also an eternal subject for the whole world business people. Advertising has been a common marketing means in the world. People becomes familiar with it and becomes to have no feelings to it. Not only in TV series industry, when user navigates the website, there is also advertising interrupting his or her navigation, which lead to user negative feelings. Advertisers should consider user experience and put it in the first place for all business people in the world.

## 8. Limitations and Future Research

There are several limitations in the current research. First of all, due to the time and money constraints, this research only selected one brand for the experiment. This brand is the food brand which is fictitious. For the future research, researchers need to look at different brands even brands in different industries such as automotive brands, cosmetics brands, and clothing in order to expect whether research results could be different based on the different kinds of brands. Since brands are quite different from each other and audience would have different perceptions for different brands, the industry of brand may influence the audience perceived intrusiveness when they watch the advertising. It could be interesting to figure out which brand would lead to higher perceived intrusiveness for audience and which one has the least intrusiveness.

Second, also due to the time and money constraints, researchers only selected the clip from one Chinese TV series. There are many themes of TV series in China, especially modern drama, costume drama, and the drama about the Republic of China. A majority of advertisements are not consistent with the content and background of the TV series. For example, creative mid-roll advertising of Coca-cola played in the Chinese costume drama of long-ago dynasty, an ancient character holding a modern-day Coke bottle. Future research can look at same brand but in the different background of the TV series to expect whether the research results would be different if the TV series background is different. For example, for Coke, researchers can see the difference of audience perceptions between an ancient character holding a modern-day Coke bottle advertising and a modern character holding a Coke bottle. It is interesting to see if there is any difference due to the different background of the TV series for the same product.

Third, videos cannot be skipped during the research, that is, participants cannot control the advertising and have to watch the whole advertising and TV series clip during the experiment. For the future studies, researchers can set advertisements as skippable to see whether the research results would be different from those that cannot be controlled. Future studies may focus on user control and see the role of user control in influencing the audience perceived intrusiveness and their attitude toward the ad and the brand.

Last, the current research only focused on the attitudes to ad and brand but not program content. Because these two types of ads are highly related to the TV series content, they are more likely to have effects on content of the TV series. For future research, researchers can figure out the effects of these creative ads on TV series content to see if there is a relationship between them, which can give suggestions to TV series producers and advertisers in industry. In addition, these creative ads are created based on the Chinese TV series environment which is affected by Chinese culture. Researchers can pay attention to Chinese culture, especially Chinese pride, and to see its effect on Chinese advertising industry.

## References

- Aaker, D. S. and Bruzzone, D. E. (1985). Causes of Irritation in Advertising. *Journal of Marketing*, 49 (2), 47-57.
- Abernethy, A. M. (1991). Physical and Mechanical Avoidance of Television Commercials: An Exploratory Study of Zipping, Zapping and Leaving. *Proceedings of the American Academy of Advertising*, Rebecca Holman, ed., New York: The American Academy of Advertising, 223-231.
- Alwitt, L.F. and Prabhaker, P.R. (1994). Identifying who dislikes television advertising: Not by demographics alone. *Journal of Advertising Research*, 34(6), 17–29.
- Alwitt, L. F. and Prabhaker, P. R. (1992). Functional and Belief Dimensions of Attitudes to Television. *Journal of Advertising Research*, 32(51), 30-42.
- Baer, S. M., Jenkins, J. S., & Barber, L. K. (2016). Home is private. . .do not enter! Introversion and sensitivity to work-home conflict. *Stress and Health*, 32(4), 441–445.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Bauer, R.A. and Greyser, S. (1968). *Advertising in America: The Consumer View*. Boston: Harvard University, Graduate School of Business Administration, Division of Research.
- Becker-Olsen, K.L. (2003). And now, a word from our sponsor: A look at the effects of sponsored content and banner advertising. *Journal of Advertising*, 32(2), 17– 32.
- Bhattacharjee, A. (2010). Constraints and consequences: Psychological reactance in consumption contexts. *Advances in Consumer Research—North American Conference Proceedings*, 37, 53–56.
- Brehm, S. and Brehm, J. W. (1981). *Psychological reactance: A theory of freedom and control*. NY: Academic Press.
- Bogart, L. (1990) *Strategy in Advertising: Matching Media and Message to Markets and Motivations*. Lincolnwood, IL: NTC Business Books.
- Cetola, H., & Prinkey, K. (1986). Introversion-extraversion and loud commercials. *Psychology & Marketing*, 3(2), 123–132.

- Clee, M. A. and Wicklund, R. A. (1980). Consumer Behavior and Psychological Reactance. *Journal of Consumer Research* 6(4), 389-405.
- Cheung, M.Y. and Ho S.Y. (2017). Characteristics of advertisements and interactivity of videos in online video websites. *SIGHCI 2017 Proceedings*, 7. Retrieved October 13, 2019, from <https://aisel.aisnet.org/sighci2017/7>.
- Clancey, M. (1994). The Television Audience Examined. *Journal of Advertising Research*, 39 (5), 27-37.
- Chang, C. (2001). The impacts of personality differences on product evaluations. *Advances in Consumer Research*, 28(1), 26–33.
- Chatterjee, P. (2008). Are unclickeed ads wasted: Enduring effects of banner and pop-up ad exposures on brand memory and attitudes? *Journal of Electronic Commerce Research*, 9, 51–61.
- Ducoffe, R. H. (1995). How Consumers Assess the Value of Advertising. *Journal of Current Issues and Research in Advertising*, 17 (1), 1-18.
- Ducoffe, R. H. (1996). Advertising Value and Advertising on the Web. *Journal of Advertising Research*, 36 (5), 21-35.
- Edwards, S. M., Li, H., & Lee, J.-H. (2002). Forced exposure and psychological reactance: Antecedents and consequences of the perceived intrusiveness of pop-up ads. *Journal of Advertising*, 31(3), 83–95.
- Elliot, M.T., and Speck, P.S. (1998). Consumer perception of advertising clutter and its impact across various media. *Journal of Advertising Research*, 38(1), 29–41.
- Eysenck, H. J. (1967). *The biological basis of personality*. Springfield, IL: Charles C. Thomas.
- Eysenck, H. J. (1977). *Human memory: Theory, research, and individual differences*. Oxford, England: Pergamon Press.
- Eysenck, H. J. (1977b). *Psychology is about people*. Harmondsworth, UK: Penguin
- Faber, R. J., Lee, M. and Nan, X. (2004). Advertising and the consumer information environment online. *American Behavioral Scientist*, 48, 447– 66.
- Furnham, A. (1984). Personality and values. *Personality and Individual Differences*, 5, 483-485.



Fuxi, Z., Chang, S. G., & Zhi, Y. Y. (2009). Research on intrusiveness model of online advertising based on neural network. *Asia-Pacific Conference on Computational Intelligence and Industrial Applications*, (PACIIA 2009), 2, 100–103.

Gallup Organization (1959). *A Study of Public Attitudes Towards Advertising*. Princeton: Princeton University Press.

Gao, X. Y. (2017). The new form of TV and film advertising placement under "Internet plus" era. *Home Drama*, (14), 136.

Goodrich, K., Schiller, S. & Galletta, D. (2015). Consumer Reactions to Intrusiveness of Online-Video Advertisements Do Length, Informativeness, and Humor Help (or Hinder) Marketing Outcomes? *Journal of Advertising Research*, 55(1), 37-50.

Goldfarb, A. & Tucker, C. (2011). Online Display Advertising: Targeting and Obtrusiveness. *Marketing Science*, 30(3), 389-404

Ha, L. (1996). Observations: Advertising clutter in consumer magazines: Dimensions and effects. *Journal of Advertising Research*, 36(4), 76–84.

Ha, L., & McCann, K. (2008). An integrated model of advertising clutter in offline and online media. *International Journal of Advertising*, 27(4), 569–592.

Holbrook, M. (1986). Aims, concepts, and methods for the representation of individual differences in esthetic responses to design features. *Journal of Consumer Research*, 13, 337-347.

Hua, X. S., Mei, T. & Li, S. P. (2008). When multimedia advertising meets the new internet era. *In: Proceedings of IEEE International Workshop on Multimedia Signal Processing*, 1–5.

Hua, X. S., Mei, T. & Li, S. P. (2007). VideoSense – Towards Effective Online Video Advertising. *Conference Paper*, January.

Hyland, T. (2000). Why Internet Advertising? Internet Advertising Bureau, Retrieved October 20, 2010, from: <http://www.iab.net/advertise/content/adcontent.html>.

Jin, C. H., & Villegas, J. (2007). Consumer responses to advertising on the Internet: The effect of individual difference on ambivalence and avoidance. *Journal of Cyber Psychology and Behavior*, 10(2), 258–265

Krugman, D. M. and Keith F. J. (1991). Differences in the Consumption of Traditional Broadcast

and VCR Movie Rental. *Journal of Broadcasting & Electronic Media*, 35 (Spring), 213-232.

LaBarbera, P. A., Weingard, P., & Yorkston, E. A. (1998). Matching the message to the mind: Advertising imagery and consumer processing styles. *Journal of Advertising Research*, 38(5), 29-43.

Li, H., Edwards, S., & Lee, J. H. (2002). Measuring the intrusiveness of advertisements: Scale development and validation. *Journal of Advertising*, 31(2), 37-47.

Li, H. and Lo, H. Y. (2015). Do You Recognize Its Brand? The Effectiveness of Online In-Stream Video Advertisements. *Journal of Advertising*, 44(3), 208–218.

Li, H., and Leckenby, J.D. (2007). *Examining the effectiveness of Internet advertising formats*. In *Internet advertising: Theory and research*, ed. D.W. Schumann and E. Thorson, 203– 24. New Jersey: Lawrence Erlbaum Associates, Inc.

Ljubojević, M., Vasković, V. & Starčević, D. (2013). The Analysis of the Users' Response to the Linear Internet Video Advertising by Using QoE Methods. *Journal of Universal Computer Science*, 19(12), 1736-1760.

Luo, C., Jiang, Z. J. and Yi, C. (2012). Effects of undesired online video advertising choice on user behavior and attitude, *ICIS 2012 Proceedings*, Orlando, Florida.

Mei, T., Guo, J. L., Hua, X. S. & Liu, F. (2010). *AdOn: toward contextual overlay in-video advertising*. Springer-Verlag.

MacKenzie, S. B. & Lutz, R. J. (1989). An Empirical Examination of the Structural Antecedents of Attitude toward the Ad in an Advertising Pretesting Context. *Journal of Marketing*, 53(April), 48–65.

Marjoribanks, K. (1989). Attitudes and environments: Personality group differences. *Psychological Reports*, 64, 99-103.

McCoy, S., Everard, A., Polak, P. & Galletta, D. F. (2008). An Experimental Study of Antecedents and Consequences of Online Ad Intrusiveness. *International Journal of Human-Computer Interaction*, 24(7), 672–699.

McCoy, S., Everard, A., Polak, P., Galletta, D.F. (2007). The effects of online advertising. *Communication of the ACM*, 50(3), 84–88

Mittal, B. (1994). Public assessment of TV advertising: Faint praise and harsh criticism. *Journal*

*of Advertising Research*, 34(1), 35–53.

Mitchell, A.A., and Olson, J.C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research*, 18 (3), 318–332.

Morimoto, M., & Chang, S. (2006). Consumers' attitudes toward unsolicited commercial e-mail and postal direct mail marketing methods: intrusiveness, perceived loss of control, and irritation. *Journal of Interactive Advertising*, 7(1), 1–11.

Morimoto, M., & Macias, W. (2009). A conceptual framework for unsolicited commercial e mail: Perceived intrusiveness and privacy concerns. *Journal of Internet Commerce*, 8(3–4), 137–160.

Mooradian, T. A. (1996). Personality and ad-evoked feelings: The case for extraversion and neuroticism. *Journal of the Academy of Marketing Science*, 24(2), 99–109.

Murry, J. P. Jr., Lastovicka, J. L., and Singh, S. N. (1992). Feeling and Liking Responses to Television Programs: An Examination of Two Explanations for Media Context Effects. *Journal of Consumer Research*, March, 441-451.

Nelson, H. L., & Teeter, D. L. (2001). *Law of mass communications: Freedom and control of print and broadcast media (10th ed.)*. NY: Foundation Press.

Orth, U. R., Malkewitz, K., & Bee, C. (2010). Gender and personality drivers of consumer mixed emotional response to advertising. *Journal of Current Issues & Research in Advertising*, 32 (1), 69–80.

Pasadeos, Y. (1990). Perceived Informativeness of and Irritation with Local Advertising. *Journalism Quarterly*, 67 (1), 35-39.

Pashkevich, M., Dorai-raj, S., Kellar, M., Zigmund, D. (2012). Empowering Online Advertisements by Empowering Viewers with the Right to Choose-The Relative Effectiveness of Skippable Video Advertisements on YouTube, *Journal of Consumer Research*, December, 65-71.

Pei, S. W. (2017). TV Series-The New Format of Content Marketing. *News Dissemination*, July, 49-49.

Qian, M. Y., Wu, G. C., Zhu, R. C., Zhang, S. (2000). Development of the Revised Eysenck Personality Questionnaire Short Scale for Chinese (EPQ-RSC). *Acta Psychologica Sinica*, 32(3), 317-323.

Rejón-Guardia, F. and Martínez-López, F. J. (2014). Online Advertising Intrusiveness

and Consumers' Avoidance Behaviors. *Handbook of Strategic e-Business Management*, 565-586

Roccas, S., Sagiv, L., Schwartz, S. H., & Knafo, A. (2002). The big five personality factors and personal values. *Personality and Social Psychology Bulletin*, 28(6), 789–801.

Sandage, C. H. and Leckenby, J. (1980). Student Attitude Toward Advertising: Institution vs. Instrument. *Journal of Advertising*, 9 (2), 29-32.

Sipior, J. C., & Ward, B. T. (1995). The ethical and legal quandary of email privacy. *Communications of the ACM*, 38(12), 48–54.

Schlosser, A.E., Shavitt, S. and Kanfer, A. (1999). Survey of Internet users' attitudes toward Internet advertising. *Journal of Interactive Marketing*, 13(3), 34–54.

Shimp, T.A. (1981). Attitudes toward the ads as a mediator of consumer brand choice. *Journal of Advertising*, 10(2), 9–15.

Speck, P. S. and Michael T. E. (1997). Predictors of Advertising Avoidance in Print and Broadcast Media. *Journal of Advertising*, 26 (3), 61-76.

Tandyonomanu, D. (2018). Ads on YouTube: Skip or Watch? *Advances in Social Science, Education and Humanities Research*, 226, 325-328.

Truong, Y., and Simmons, G. (2010). Perceived intrusiveness in digital advertising: strategic marketing implications. *Journal of Strategic Marketing*, 18(3), 239–256.

Van Reijmersdal, E.A., Neijens, P.C., and Smit, E.G. (2005). Readers' reactions to mixtures of advertising and editorial content in magazines. *Journal of Current Issues and Research in Advertising*, 27, 39 – 53.

Van Reijmersdal, E.A., Neijens, P.C., and Smit, E.G. (2007). Effects of TV brand placement on brand image. *Psychology & Marketing*, 24, 403 –20.

Wells, W. D., Clark, L., & McConville, M. (1971). A reaction profile for TV commercials. *Journal of Advertising Research*, 11, 11–17.

Wehmeyer, K. (2007). Mobile ad intrusiveness—the effects of message type and situation. *Proceedings of the 20th bled eConference*, June, 4–6.

Ying, L., Korneliussen, T., & Grønhaug, K. (2009). The effect of ad value, ad placement and ad execution on the perceived intrusiveness of web advertisements. *International Journal of*

*Advertising*, 28(4), 623–638.

Zhang P. (2011). Analyze product placement in Chinese film and TV series from the perspective of communication study. *Xinwenqianshao*, (2), 92-95.

Zanot, E.J. (1981). Public attitudes toward advertising. In H.H. Keith (ed.), *Advertising in a New Age: American Academy of Advertising Proceedings*. Provo, UT: American Academy of Advertising.

Zanot, E.J. (1984). Public attitudes toward advertising: The American experience. *International Journal of Advertising*, 13, 3–15.

Zhao, X. S. and Shen, F. Y. (1995). Audience Reaction to Commercial Advertising in China in the 1980s. *International Journal of Advertising-The Review of Marketing Communications*, 14(4), 374-390

Appendix



Picture A.1: Creative mid-roll advertising



Picture A.2: In-video overlay advertising

**Questionnaire:**

Instruction: “Ding Ding Shu Pian” is a brand of potato chips. In this experiment, you will watch an advertisement of “Ding Ding Shu Pian” played during the TV series called “Darker” which is an online TV series in China. The total timing of video is around four minutes. You cannot close or skip the whole video during experiment. After watching video, you will complete the questionnaire which tests your attitudes toward the advertisement.

Based on the advertisement you just watched, please answer the following questions:

All scales are seven-point Likert scale, 1 is strongly disagree and 7 is strongly agree

**When the ad was shown, I thought it was...**

	Strongly disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neutral (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
Distracting							
Disturbing							
Forced							
Interfering							
Intrusive							
Invasive							
Obtrusive							

**How well the following terms fit the ad you just watched:**

	Strongly disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neutral (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
Irritating							
Phony							
Ridiculous							
Stupid							
Terrible							

**Overall reactions toward ad:**

Very good	1	2	3	4	5	6	7	Very bad
Very Pleasant	1	2	3	4	5	6	7	Very Unpleasant
Very favorable	1	2	3	4	5	6	7	Very Unfavorable

**Overall reactions toward brand:**

Very good	1	2	3	4	5	6	7	Very bad
Very Pleasant	1	2	3	4	5	6	7	Very Unpleasant
Very favorable	1	2	3	4	5	6	7	Very Unfavorable

<b>Personality Information:</b>	Yes	No
Are you a talkative person?		
Are you rather lively?		
Do you enjoy meeting new people?		
Can you usually let yourself go and enjoy yourself at a lively party?		
Do you usually take the initiative in making new friends?		
Can you easily get some life into a rather dull party?		
Do you tend to keep in the background on social occasions?		
Do you like mixing with people?		
Do you like plenty of bustle and excitement around you?		
Do you like telling jokes and talking about funny things?		
Do other people think of you as being very lively?		
Can you get a party going?		

**Demographic information:**

Gender: Male      Female

Age: Under 18      18-24      25-34      35-44      45 and older

Education: Less than high school / High school graduate / some college / Graduate degree /

Master's degree / Doctorate





Picture A.3: Video 1



Picture A.4: Overlay 1



Picture A.5: Video 2



Picture A.6: Overlay 2