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ABSTRACT

PREDICTING THE USE OF ONLINE VIDEO ADVERTISING:
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This study investigated factors influencing consumers' intention to watch online video ads, as well as actual watching behavior, using the theory of planned behavior (TPB). All components including belief structures (behavioral, normative, and control beliefs), determinants of intention, intention, and actual behavior were examined. For more in-depth analysis, behavioral beliefs were decomposed into five distinct expected outcomes and crossover effects (which signify a significant relationship) were added between beliefs and determinants, and between different determinants. A positive relationship was found between intention and actual behavior. All determinants of intention (attitude toward watching online video ads, subjective norm, and perceived behavioral control) positively influenced intention. Perceived behavioral control was negatively related to behavior. Crossover effects were added to connect both subjective norm and perceived behavioral control to attitude. Within behavioral beliefs, three expected outcomes (information, relaxation, and escapism-pass time) showed a positive influence on attitude. Another expected outcome, social interaction, was found to positively influence subjective norm. Entertainment, the final expected outcome, showed a positive relationship with all three determinants. Normative beliefs and control beliefs had a positive influence on subjective norm and perceived behavioral control, respectively. Implications of these findings for researchers and advertisers are further discussed.

This thesis is dedicated to my beloved parents, Daewoo Lee and Hyangsun Kim, and my sister, Yoonji Lee, with great thanks to God.

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CHAPTER 1

INTRODUCTION

With the growing emergence of broadband Internet access and enhanced online video platforms such as YouTube, a growing number of consumers are watching online videos. In 2007, about 75% of Internet users in the U.S. watched online videos, averaging three hours of video per person each month (comScore 2007). In response to the increase in popularity of online videos among consumers, many advertisers and Web publishers have shown a growing interest in merging online videos and advertising. Online videos serve as a type of rich media advertising that include streaming audio and video features presented on the Web (Appiah 2006), mixing the branding power of traditional broadcast advertising with the interactive power of the Internet (Brown 2008). Spending on online video advertising was at $410 million in 2006 and is estimated to be $4.3 billion by 2011 (eMarketer 2007a). Due to advertisers' increasing use of online video ads, many consumers have been exposed to online video advertising. According to eMarketer (2007b), 77% of online video viewers, or 88 million Internet users in the U.S., watched online video ads in 2006; the number is expected to grow to reach 90% of viewers, or 165 million Internet users in the U.S., by 2011.

Brown (2008) explained four key benefits of using online video ads as a new form of advertising. First, online video ads have outperformed other online marketing forms when stimulating consumers' ability to recall specific brands after seeing advertisements about them. Because online video ads are likely to be accessed by the consumers themselves, and because many people actually enjoy watching them, consumers consider them entertaining video clips, and not simply advertisements. This leads to more active

consumption of the information presented in the ad, which leads to a greater ability to recall the information presented after a time delay. Second, visually appealing messages can maximize consumers' direct response action in the form of an immediate purchase decision. Online video ads are designed to attract consumers' attention with visual and auditory stimulation. When these senses are stimulated simultaneously, advertisers can create humor, fear, or other emotions. Affective responses evoked from such stimuli will be more likely to motivate the consumer to buy the product than responses that do not involve emotion. Third, the production cost of online video ads is much lower compared to traditional TV ads. The final benefit is that videos differentiate themselves from ads that use other types of online content (i.e., pop-ups or banners) because video is far more compelling. These benefits have encouraged advertisers to turn their eyes toward using online video advertising in fast-growing numbers.

Online video advertising is presented in several different formats: pre-roll, instream, in-banner ads, contextual ads, and webisodes/branded video (Baldwin 2007). Pre-roll emerges before the start of a video clip; however, because of its intrusiveness, many consumers do not favor this format. Instream is a mixed style, incorporating online video and TV commercials by interrupting online videos with advertisements. An ad is referred to as in-banner if a video clip is inserted into an existing banner. A contextual ad places ads near videos to attract users' clicks. Webisodes/branded videos are created for brand ads that have a few minutes of running time and include interactive functions; when branded ads have distinct storylines, they are referred to as webisodes. Online video ads can also be broadly categorized into two types: online video ads with video playback control functions (e.g., play, stop, rewind, etc.) and online video ads without

control functions. The online video ads with video playback controls have distinctive characteristics that enable viewers to actively consume the ads (i.e. buttons labeled play, pause, or stop). Advertising with video playback controls on the Internet is of primary interest in the current study.

Online video advertising with video playback controls presents differences with traditional TV advertising. One difference is seen in the active exposure of online video advertising. Consumers are exposed to ads on traditional media, such as TV, with very minimal voluntary action; they are voluntarily exposed to the ads on the Internet to a much greater degree (have to visit a Web site and click to watch a video clip). Another difference between TV advertising and online video advertising with video playback controls is the degree of control over the presentation of ads. Unlike the lack of control over the presentation of messages when watching traditional TV commercials, online video ads provide consumers control over the presentation of messages with technical functions similar to videocassette recorders (VCRs) such as replay, stop, and pause. Consumers can customize information flow to their needs using the interactive features of online video ads. The active exposure of, and the greater control over, the presentation of online video ads creates new opportunities for advertisers because they increase the likelihood that consumers will watch their ads.

Despite the growing popularity of online video advertising among Internet users and its potential as a new form of advertising, it remains one of the toughest formats for advertisers to use effectively (Brown 2008). The main purpose of this study is to examine the factors that predict consumers' use of online video advertising and explore the relationships among those factors. The theory of planned behavior (TPB) (Ajzen 1985,

1991) is considered one of the most useful frameworks in explaining what key factors influence how consumers evaluate a behavior, and how consistently they perform that behavior (George 2004; Hansen 2008; Hsu, Wang, and Wen 2006; Lim and Dubinsky 2005; Tan and Teo 2000; Taylor and Todd 1995). The TPB is a comprehensive model that relates consumers' belief structures, determinants of intention, intention, and actual behavior (Lim and Dubinsky 2005). This model serves as a theoretical framework in the current study. Applying the TPB to the current study is useful in that it allows for examination of a wide range of relationships that would influence consumers' consumption behavior. As proposed by previous studies (e.g., Lim and Dubinsky 2005; Taylor and Todd 1995), decomposed behavioral beliefs and crossover effects are examined in addition to the model's original components to better understand factors that influence consumers' use of online video ads.

CHAPTER 2

LITERATURE REVIEW

Online Video Advertising

Online video advertising is an online broadband video commercial that "may appear before, during, and after a variety of content including streaming video, animation, gaming, and music video content in a player environment. This definition includes broadband video commercials that appear in live, archived, and downloadable streaming content" (Interactive Advertising Bureau 2005). Sometimes, 15-30 second-long TV commercials are digitalized and uploaded onto Web sites as online video ads. Other times, advertisements with streaming video and audio are specifically created for the Internet, without length and content restriction. For instance, in 2006, Dove launched its advertisement called "Evolution," which was made for the Internet only. This ad lasts 75 seconds, and has since been downloaded millions of times (Garfield 2007; Neff 2006).

The most prominent difference between online video advertising with video playback controls and TV advertising is that, contrary to the passive viewing of TV advertising, consumers actively watch online video ads, exercising control over the exposure to, and the presentation of, the advertising content. User control and audience activity of online video advertising consumption can be demonstrated in three phases: pre-exposure, during-exposure, and post-exposure activities. Each phase shows characteristics of user control, as well as audience activity.

Pre-exposure activity reflects audiences' preparation for the consumption of online video ads (Lin 1999; Niekamp 2003). Unlike the forced exposure of traditional TV advertising (Dijkstra, Buijtels, and Raaij 2005), consumers have voluntary exposure to

online video ads with video playback controls, either by actively searching for a particular ad on video-sharing Web sites or by clicking the link to an ad in an email they received from friends or acquaintances. Voluntary exposure to ads by visiting Web sites and clicking on video clips may increase consumers' attention to the content and stimulate the cognitive learning process (Cho 1999).

During-exposure activity represents the degree of audience involvement with the content and media (Lin 1999). Contrary to passive viewing of traditional TV advertising, consumers actively watch online video ads by using the playback controls such as play, stop, rewind, or fast-forward. Control functions allow consumers to decide to watch online video ads repeatedly when they perceive them to be interesting or meaningful. Previous researchers have suggested that interactive functions of the Internet, such as capability to select and avoid presented messages, cause consumers to process the information more actively (Rodgers and Thorson 2000; Sicilia, Ruiz, and Munuera 2005; Widing and Talarzyk 1993). User control over the presentation of information may also have positive effects on consumers' evaluation of contents because of "the changing consumers' needs for information during the information acquisition process itself" (Ariely 2000, p. 234).

Post-exposure activity includes short-term and long-term effects after the media exposure, such as discussion of the contents with others, emotional response, and formation of attitudes toward the contents (Lin 1999; Niekamp 2003). Voluntary actions cause consumers to react to the information presented by posting their opinions about or rating the ads after watching them. Additionally, online video ads typically have an option for passing them along via email (e.g., 'send this to a friend' or 'share'); if

consumers want to share the ad they just watched with their friends, all it takes is one click of a button. When email is used as a tool for interpersonal communication between family and friends, it can increase the recipients' active acceptance of information included in emails received (Phelps et al. 2004).

Given that online video advertising requires consumers' active watching behavior, questions about what outcomes consumers expect from watching online video ads and how to predict consumers' uses of online video ads have emerged. In order to explore various factors affecting consumers' uses of online video advertising, and to examine their relationships with intention to watch as well as watching behavior, the TPB can be used as a theoretical framework in this study.

Conceptual Framework: Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) is one of the most useful theoretical frameworks in identifying factors that predict intention to perform a particular behavior, which in turn is linked with the actual behavior (Bansal and Taylor 1999, 2002; Fortin 2000; George 2004; Taylor and Todd 1995). The TPB provides researchers with insight into the exploration of both internal factors (e.g., consumers' perception of events) and external factors (e.g., social influences, resource accessibility, or availability) that may influence consumers' intentions to engage in a behavior (Lim and Dubinsky 2005).

The TPB has been applied to various fields of research: users' acceptance of computer technology (Davis, Bagozzi, and Warshaw 1989), college students' intention and behavior with respect to leisure time (Ajzen and Driver 1992), the inclination to bid in online auctions (Bosnjak, Obermeier, and Tuten 2006), online shopping behavior (Hansen, Jensen, and Solgaard 2004; Wu 2006), switching behavior of customer service

provider (Bansal and Taylor 2002), participation in Web survey (Bosnjak, Tuten, and Wittmann 2005), the intention to use online stock trading (Gopi and Ramayah 2007), consumers' intention to use e-coupons (Kang et al. 2006), and Web site pre-visit intentions for different product/brand types (Wu 2007).

Basic Assumptions of the TPB

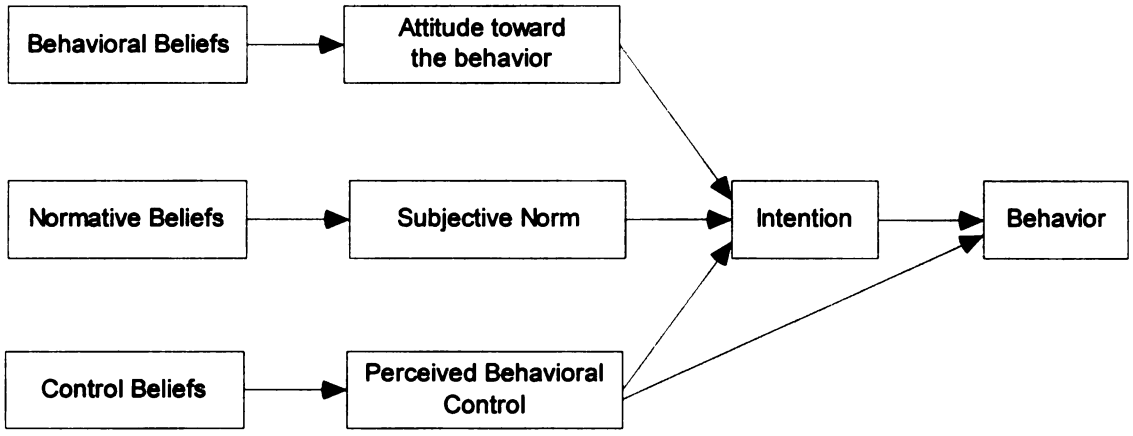
Ajzen (1985, 1991) developed the TPB in order to cope with limitations of the Theory of Reasoned Action (TRA) (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975) when examining various behavioral situations, such as individuals having incomplete volitional control (Ajzen 1985, 1991; George 2004; Taylor and Todd 1995). The TRA has been one of the most widely studied models of attitude and behavior (Shih and Fang 2004; Taylor and Todd 1995). According to the TRA, a consumer's behavior is determined by his or her behavioral intention which is influenced by attitude toward the behavior and subjective norm from others (Fishbein and Ajzen 1975; Hansen 2008). The TRA has obtained broad support for predicting behavioral intention and behavior in various disciplines such as social psychology, communication, and consumer behavior (Davis et al. 1989; Madden, Ellen, and Ajzen 1992; Sheppard, Hartwick, and Warshaw 1988; Taylor and Todd 1995). However, the TRA assumes that behaviors are being examined under complete volitional control (Madden et al. 1992). Thus, situations where behaviors do not require skills, resources, or opportunities cannot be explained using the TRA (Conner and Armitage 1998).

For a more elaborate prediction of consumers' behavioral intentions and actual behaviors with different levels of volitional control, an additional factor, perceived behavioral control, was added to the TRA. The result was a new theory, called the TPB

(Ajzen 1985, 1991; Ajzen and Madden 1986; Bansal and Taylor 2002; George 2004; Madden et al. 1992). Perceived behavioral control is important in that it makes it possible to investigate volitional behaviors, keeping in mind the goals of consumers and the outcomes attainable by performing those behaviors (Conner and Armitage 1998). Several studies indicated that the TPB is more powerful than the TRA (Conner and Armitage 1998; George 2004; Madden et al. 1992; Shih and Fang 2004; Tan and Teo 2000) because including perceived behavioral control in the theory helps extend the TPB's boundary beyond the condition of pure volitional control (Madden et al. 1992).

A main assumption of the TPB is that people usually behave in a sensible manner, considering both obtainable information and the internal or external implications of a behavior (Ajzen 1985). Ajzen (1985, 1991) contended that a central determinant of the TPB is an individual's intention when exhibiting a particular behavior. It is assumed that intentions satisfy the motivational nature that determines human behavior. In other words, as people increase their intention to perform a behavior, they are more likely to act on it. When people increase or decrease their intention, it is assumed that they consult three considerations, which are conceptually separated: attitude toward the behavior, subjective norm, and perceived behavioral control (detailed explanations of each term are provided in the following section). Each determinant has its own belief structure: behavioral beliefs, normative beliefs, and control beliefs, respectively (Ajzen 1985, 1991). The TPB model and its components developed by Ajzen (1985, 1991) are shown in Figure 1.

Figure 1
Theory of Planned Behavior (Ajzen 1991, 2006)



Basic Components of the TPB

Intention and Actual Behavior. Actual behavior in the TPB refers to an observable manifestation of a behavior, which is performed (or not performed) with respect to a particular target, in a given situation, at a specific time (Fishbein and Ajzen 1975). Fishbein and Ajzen (1975) suggested that the most important antecedent of a volitional behavior is an individual's intention to perform the behavior. *Intention* refers to "how hard people are willing to try or how much of an effort they are planning to exert" (Ajzen 1991, p. 181). Intention and actual behavior are considered to have a strong relationship, assuming that people tend to execute behaviors that they intend to perform (Conner and Armitage 1998). However, this does not mean that measuring intention always results in a perfect prediction of an actual behavior; there are some criteria to consider first. Fishbein and Ajzen (1975) proposed three main factors that affect the relationship between intention and behavior (p. 369): (a) the degree to which the measure of intention and the behavioral criterion correspond with respect to their levels of specificity, (b) the

stability of intentions between time of measurement and performance of the behavior, and (c) the degree to which carrying out the intention is under the volitional control of the individual.

Determinants of Behavioral Intention and Their Belief Structures. The first determinant of behavioral intention is *attitude toward the behavior (A)*. Ajzen (1991) defined attitude toward the behavior as the degree that an individual has a favorable or unfavorable evaluation or assessment of the given behavior. Attitude toward the behavior is determined by the sum of accessible *behavioral beliefs* which refer to the subjective probability that the behavior will achieve expected outcomes positively or negatively (Ajzen 1991; Fishbein and Ajzen 1975). As indicated by the expectancy – value model (Fishbein and Ajzen 1975), attitude toward the behavior is determined by the sum of behavioral beliefs, with the strength of each belief (b) weighted by the evaluation (e) of the outcome or attribute: $A \propto \sum b_i e_i$.

The second determinant of behavioral intention, *subjective norm (SN)*, refers to the perceived social pressure to perform (or not perform) a particular behavior (Ajzen 1991; Fishbein and Ajzen 1975). Ajzen (1985, 1991) indicated that subjective norm is determined by the sum of accessible *normative beliefs* which represent the perceived behavioral expectations from or opinions of important referent individuals or groups (Ajzen 1991). There are various referent individuals and groups depending on demographics (e.g., parents, family, and friends) and situations (e.g., teacher, customer, and supervisor). Specifically, subjective norm is determined by the sum of normative beliefs, with the strength of each normative belief (n) weighted by motivation to comply (m) with the given referent: $SN \propto \sum n_i m_i$.

The third determinant of behavioral intention is the extent of *perceived behavioral control (PBC)*. According to Ajzen (1991), perceived behavioral control reflects the individual's perception of his or her ability to perform a particular behavior. The TPB argues that the availability of the resources and opportunities that consumers will need to become engaged in a behavior influences behavioral intentions. Further, the confidence individuals have about their ability to perform a given behavior is correlated not only with the behavioral intention but also with the actual performance of the behavior (Ajzen 1991; Gopi and Ramayah 2007). Perceived behavioral control is determined by the sum of accessible *control beliefs* which refer to the perceived presence of requisite resources and opportunities to perform a behavior in question (Ajzen 1991). Specifically, perceived behavioral control is determined by the sum of control beliefs, with the strength of each control belief (c) weighted by perceived power (p) of the control factor: $PBC \propto \sum c_i p_i$. Control beliefs are produced by the past experience of the behavior, by second-hand information of the behavior, by the experiences of friends and referent people, or by other factors that facilitate or impede performance of a behavior (Ajzen 1985, 1991; Doll and Ajzen 1992). In general, as individuals feel confident that they have more resources and opportunities and there are fewer hindrances in performing a behavior, they perceive that they have more control over the behavior (Ajzen 1991; Conner and Armitage 1998; Doll and Ajzen 1992; Taylor and Todd 1995).

Decomposition of Belief Structures of the TPB

Over the years, researchers have studied belief structures within the TPB. Despite the usefulness of studying each belief structure unidimensionally, it cannot give researchers a full understanding of the formation of beliefs (Hsu et al. 2006). The TPB

model that uses unidimensional belief structures tends to underestimate the complicated relationships between the belief structures and determinants of intention (Bagozzi 1982; Miniard and Cohen 1983; Ryan 1982; Taylor and Todd 1995). To solve this problem, researchers have emphasized a need to produce more parsimonious and comprehensive models. Several researchers have explored the multidimensionality of the belief structures in order to better understand their relationship with determinants of intention (Bagozzi 1982; George 2004; Lim and Dubinsky 2005; Shimp and Kavas 1984; Taylor and Todd 1995). Bagozzi (1982) studied the appropriateness of multidimensional belief structures, compared to unidimensional belief structures, and discovered that using the unidimensional belief structure resulted in less informative data. Additionally, Shimp and Kavas (1984) insisted that the cognitive structure of belief is not composed unidimensionally. Therefore, decomposition of behavioral beliefs was determined as the most appropriate way to examine beliefs multidimensionally.

Each belief structure can be decomposed according to its characteristics, causes, or outcomes. In the study of consumers' adoption behavior when a new product is introduced, Taylor and Todd (1995) decomposed behavioral beliefs according to perceived characteristics of an innovation (Rogers 1983), and the control beliefs by self-efficacy, internal control of an individual's ability to perform a behavior (Ajzen 1991; Bandura 1982), and facilitating conditions, external control of the availability of resources such as time and technology to engage in a behavior (Triandis 1980). However, they did not decompose the normative beliefs because they expected that referent groups were going to be significantly correlated. Lim and Dubinsky (2005) decomposed behavioral beliefs using consumers' expectations that were based on characteristics of an

e-store, normative beliefs by family and friends who impact shoppers' purchasing decisions, and control beliefs by self-efficacy and facilitating conditions. George (2004) decomposed behavioral beliefs based on expectations of online purchasing (e.g., Internet privacy and trustworthiness) and included only the dimension of self-efficacy in control beliefs.

Crossover Effects of the TPB

In addition to decomposition, the TBP has extended its boundary to crossover effects among components to improve an explanatory power of the model (Liska 1984; Oliver and Bearden 1985; Ryan 1982; Shimp and Kavas 1984; Taylor and Todd 1995). Although the independent influences of determinants of intention on intention are posited in the TPB, crossover effects among those determinants have been under discussion (Bansal and Taylor 2002; Taylor and Todd 1995). To improve the predictive power of the TPB, Eagly and Chaiken (1993) argued the necessity for examining possible interdependencies among attitude, subjective norm, and perceived behavioral control in the TPB. Lim and Dubinsky (2005) included crossover effects among determinants of intention in the model to examine consumers' purchase intention, and found significant paths from perceived behavioral control to subjective norm and from subjective norm to attitude toward online shopping.

Moreover, other studies have also examined crossover effects between belief structures and determinants of intention. For example, Taylor and Todd (1995) examined the relative influences of the dimensions of behavioral beliefs on attitude toward a behavior and perceived behavioral control, normative beliefs on subjective norm and attitude toward a behavior, and the dimension of control beliefs on perceived behavioral

control and subjective norm. Some studies explored the influence of normative beliefs on attitude and subjective norm (Oliver and Bearden 1985; Ryan 1982); others examined the influence of behavioral beliefs on attitude and subjective norm (Oliver and Bearden 1985; Shimp and Kavas 1984).

Predicting the Use of Online Video Advertising Using the TPB

The TPB can be considered as a useful framework in understanding consumers' use of online video ads for several reasons. First, the TPB model includes factors that stimulate a behavior by influencing attitudes toward the behavior (i.e., attitude toward watching online video ads), as opposed to an object (i.e., attitude toward an online video ad) (Hansen 2008). Second, as the TPB explains the influence of subjective norm on intention to perform a behavior, consumers often decide to watch online video ads due to opinions of important people. Finally, the TPB can make it possible to examine the influence of consumers' voluntary or active exposure to online video ads on their intention and consumption of online video ads.

Intention and Actual Watching of Online Video Advertising

The most essential element of the TPB model is intention to perform an actual behavior. Examining consumers' intention to perform a behavior provides advertisers the opportunity to observe how consumers act on intention. Additionally, predicting an actual behavior is important because it allows them to develop communication strategies that will directly affect the behavior. A relationship between intention and actual behavior has been found with respect to various types of behaviors. Bosnjak et al. (2006) showed evidence that there was a positive relationship between intention to bid in online auctions and actual bidding in online auctions. Shih and Fang (2004) also found that consumers'

intention to use Internet banking was positively related to actual usage of Internet banking. In the study of online shopping, George (2002) also found the significant, positive influence of intention on purchasing online. In general, a behavior can be predicted by intention to perform the behavior with considerable precision (Ajzen 1988; Sheppard et al. 1988). Therefore, it is expected that the stronger consumers' intention to watch online video ads, the more frequently they will watch the ads.

> **H1:** Intention to watch online video ads will be positively associated with the frequency of watching online video ads.

Determinants of Behavioral Intention in Online Video Advertising

The TPB premises that behavioral intention is determined by attitude toward a behavior, subjective norm, and perceived behavioral control (Ajzen 1985, 1991; Madden et al. 1992; Shih and Fang 2004). In other words, when consumers have a more favorable attitude toward a behavior, stronger subjective norm, and greater perceived behavioral control, they tend to have a stronger intention to engage in the behavior (Bosnjak et al. 2005, 2006).

Attitude and Intention to Watch Online Video Ads. Many studies of the TPB have shown a significant influence of attitude toward a given behavior on intention to perform the behavior (Davis et al. 1989; Gopi and Ramayah 2007; Mathieson 1991; Taylor and Todd 1995; Shih and Fang 2004). Specifically, Hsu et al. (2006) found that attitude toward using mobile coupons was positively associated with intention to use mobile coupons. Bosnjak et al. (2006) showed that attitude was positively related to the intention to use online auctions for purchasing. George (2002) demonstrated that the more positive the consumers' attitude toward Internet purchasing, the stronger their intention to purchase online. Thus, it is expected that a more favorable attitude toward watching

online video ads will lead to a stronger intention to watch online video ads.

H2: Attitude toward watching online video ads will be positively associated with intention to watch online video ads.

Subjective Norm and Intention to watch online video ads. Consumers' behaviors can be influenced by various social entities (e.g., friends, family, neighbors, and Internet groups) (Lim and Dubinsky 2005; Ryan and Bonfield 1980). In general, the stronger the subjective norm, the stronger the behavioral intention (Hansen 2008; Lim and Dubinsky 2005). For example, Taylor and Todd (1995) showed that subjective norm was a significant determinant of intention to adopt innovation. Hansen et al. (2004) found the positive impact of subjective norm on consumers' intention for online grocery shopping. Gopi and Ramayah (2007) also supported positive influences of subjective norm on intention to use Internet stock trading. Therefore, it is predicted that consumers' perceived social pressure to watch online video ads will have a positive and significant effect on intention to watch online video ads.

H3: Subjective norm will be positively associated with intention to watch online video ads.

Perceived Behavioral Control and Intention to watch online video ads. Perceived behavioral control influences intention to perform a behavior (Ajzen 1985, 1991). In other words, people have a stronger intention to do a behavior if they perceive that performing the behavior is easy (Hansen 2008). This influence of perceived behavioral control on intention is based on the concept that perceived behavioral control motivates individuals' assessment of the likelihood of performing a behavior (Ajzen and Madden 1986). Several studies have found the positive influence of perceived behavioral control on intention (Ajzen 1991; George 2004; Gopi and Ramayah 2007; Madden et al. 1992;

Mathieson 1991; Shih and Fang 2004). Taylor and Todd (1995) found that there was a positive relationship between perceived behavioral control and intention to adopt an innovation. Hsu et al. (2006) found that perceived behavioral control, the perception that consumers have enough ability and knowledge, was positively associated with intention to use mobile coupons. Perceived behavioral control was also positively related to intention to participate in a Web survey (Bosnjak et al. 2005). With voluntary exposure to online video ads, therefore, it is expected that consumers' perceived ability to watch online video ads will positively affect their intention to watch online video ads.

> **H4:** Perceived behavioral control will be positively associated with intention to watch online video ads.

Perceived Behavioral Control and Actual Watching. In addition to influencing behavioral intention, perceived behavioral control can also influence actual behavior directly (Ajzen 1991). There are two rationales for this relationship. First, perceived behavioral control can increase the probability of performing a behavior when intention is held constant. Second, perceived behavioral control is used as an alternative for a measure of actual control which is assumed to directly influence the actual behavior. As an example of the direct effect of perceived behavioral control on an actual behavior, George (2004) found that consumers who had more confidence in their abilities to perform online purchases were more likely to perform the actual purchases online. Similarly, Gopi and Ramayah (2007) demonstrated that as more resources, such as time, computer, network, and opportunities were available to consumers, perceived control of the behavior was increased, which eventually generated more likelihood to perform online stock trading. Therefore, it is predicted that when consumers feel they have the ability to watch online video ads, the frequency of their actual watching would be

increased.

H5: Perceived behavioral control will be positively associated with the frequency of watching online video ads.

Crossover Effects among Determinants of Intention to Watch Online Video Advertising

As mentioned earlier, exploring crossover effects among determinants of intention to perform a behavior provides researchers with a better understanding of factors that predict consumers' intention and the actual behavior and the relationships among those factors. The current study examines crossover effects between determinants of intention to watch online video ads because those determinants may have both a direct influence on intention and an indirect influence through crossover effects. Among those determinants of intention, attitude toward watching online video ads has been considered the most powerful predictor of consumers' behavioral intention. For example, attitude was the most important determinant of online grocery shopping intention (Hansen 2008); attitude toward usage of text messaged coupons had the strongest impact on intention to use them (Hsu et al. 2006); and attitude toward bidding on items (e.g., eBay) had a stronger impact on willingness to bid online than other determinants (Bosnjak et al. 2006). Based on these studies, attitude is considered the most powerful determinant of intention to watch online video ads, and is expected to play a mediator role between the other determinants and intention.

Subjective Norm and Attitude toward Watching Online Video Ads. According to Bansal and Taylor (2002), there are significant interdependencies between subjective norm and attitude, represented by crossover effects. In the study of online shopping, several researchers have reported this relationship. Shimp and Kavas (1984) were among the first to note that attitude had a strong influence on subjective norm in the context of

coupon usage. Taylor and Todd (1995) noted a strong influence of subjective norm on consumers' attitude toward adoption of a new product. Finally, Lim and Dubinsky (2005) found that when consumers believe important referent people or groups think they should shop online (subjective norm), they are more likely to develop a positive attitude toward online purchasing. Based on these results, it is predicted that subjective norm (i.e., important referents' expectations) will positively influence consumers' attitudes toward watching online video ads.

> **H6:** Subjective norm will be positively associated with attitude toward watching online video ads.

Perceived Behavioral Control and Attitude toward Watching Online Video Ads. Some researchers have investigated the relationship between perceived behavioral control and attitude toward a behavior (Ajzen and Madden 1986; Ajzen and Driver 1992; Doll and Ajzen 1992). For instance, Bansal and Taylor (2002) found that, when consumers had enough control over switching service providers, a positive attitude toward switching was formed, which in turn, led to a stronger intention to switch. Eagly and Chaiken (1993) indicated that "people take control into account in conjunction with their desire to engage in a behavior" (p. 189) and this implies a relationship between perceived behavioral control and attitude toward a behavior. Thus, it is expected that consumers' perceived ability to watch online video ads will positively affect their attitude toward watching online video ads.

> **H7:** Perceived behavioral control will be positively associated with attitude toward watching online video ads.

Belief Structures of Watching Online Video Advertising

When applying the TPB in online video advertising, any characteristics, attributes,

and environmental influences can be positioned to each belief structure (i.e., behavioral beliefs, normative beliefs, and control beliefs) with respect to each structure's definition.

Behavioral Beliefs and Attitude toward the Behavior. Decomposition of behavioral beliefs makes it possible to examine the role of various characteristics and benefits of a behavior in influencing attitudes toward the behavior. Researchers have decomposed behavioral beliefs in various ways to discover the relationship between behavioral beliefs and attitudes. Taylor and Todd (1995) decomposed behavioral beliefs for consumers' adoption behaviors by identifying three salient behavioral beliefs of adopting innovation based on characteristics of innovation (Rogers 1983): relative advantage, complexity, and compatibility. They found significant paths between relative advantage/compatibility and attitude toward adopting innovation and between complexity and attitude. Similarly, Shih and Fang (2004) examined the same behavioral beliefs to study Internet banking usage and found significant influences of relative advantage and complexity on attitude toward using Internet banking. Hsu et al. (2006) decomposed behavioral beliefs, in the context of predicting consumers' intention to use mobile text message coupons, into compatibility, personal innovativeness, perceived ease of use, and perceived usefulness. Among those beliefs, compatibility, perceived ease of use, and perceived usefulness were related to attitude toward mobile coupon usage. In examining consumers' online shopping usage, Lim and Dubinsky (2005) decomposed behavioral beliefs into merchandise characteristics (e.g., variety of merchandise and timely delivery), reliability, and navigation (e.g., downloading Web pages) of e-retailers, and found a significant influence of merchandise characteristics and navigation on attitude toward purchasing on the Internet. George (2004) divided behavioral beliefs into Internet

trustworthiness and Internet privacy (e.g., the unauthorized secondary use of personal information). Among these two behavioral beliefs, only Internet trustworthiness was positively related to attitude toward Internet purchasing. Hansen (2008) used four dimensions of behavioral beliefs when examining the use of online grocery shopping: openness to change, to increase variety and excitement; conservation, to keep things simple; self-enhancement, to gain wealth and power; and self-transcendence, to encourage social relations. The results indicated that conservation had a negative influence on attitude toward using online grocery shopping; self-enhancement had a positive influence.

Behavioral beliefs in the context of online video advertising refer to the subjective probability that watching online video ads will achieve certain expected outcomes. In order to examine behavioral beliefs in relation to online video advertising, it is necessary to identify what kinds of outcomes consumers can expect from watching online video ads and how those expected outcomes influence attitude toward watching online video ads. Individuals may have different assessment of each of the expected outcomes and each expected outcome may affect attitude toward watching online video ads separately. In this respect, treating all expected outcomes as a monolithic belief may obscure a true effect of each belief on attitude toward watching online video ads. Thus, decomposing the behavioral beliefs can help researchers better understand the effects of the behavioral beliefs on attitude toward watching online video ads.

Online video advertising is a new form of advertising on the Internet. In order to decompose behavioral beliefs (or expected outcomes) of watching online video advertising, a review of previous literature concerning motivations for watching

advertising and for using the Internet seems to be helpful. In media studies, Lin (1999) defined motivations as "the type of perceived incentives or rewards that can propel an individual to take action and engage in media use" (p. 203). Researchers have suggested that motivations reflect expected outcomes, benefits, or gratifications sought for media uses (Dobos 1992; Lin 1999).

In terms of advertising usage motivations, marketing uses (e.g., using advertising for searching for product information, gaining vicarious consumption); structuring time (e.g., using advertising breaks for doing something); enjoyment (e.g., using advertising for entertainment and escapism from daily life); scanning the environment (e.g., using advertising for surveillance monitoring trends or environments); social interaction (e.g., using advertising for peer relationship providing a common agenda to talk about); and self-affirmation/transformation (e.g., using advertising for reinforcement of attitudes and values comparing audience's thoughts with ads) were identified (O'Donohoe 1994). Similarly, Pollay and Mittal (1993) identified three reasons why consumers use advertising: consumers consider that advertising provides product information; advertising guides social roles and images showing lifestyles and social communication; and advertising offers hedonic and pleasure experiences.

In the context of Internet usage motivations, a number of researchers have identified gratifications which consumers expect to fulfill by using the Internet. Some researchers identified researching for gathering information, communicating with others, surfing for entertainment, and shopping as motivations for using the Internet (Rodgers and Sheldon 2002). Others found motivations for escapism, information, socialization, interactive control (e.g., choosing Web sites or time to view), transaction-based security

and privacy concerns, non-transactional privacy concerns, and economic motivation for shopping and buying (Korgaonkar and Wolin 1999). In general, entertainment, passing time, relaxation, information, social interaction, shopping, convenience, and need for unique and novel ideas were identified as motivations for the Internet use (Ferguson and Perse 2000; Kaye and Johnson 2002; LaRose and Eastin 2004; Papacharissi and Rubin 2000; Stafford and Stafford 2001).

In addition to the motivations for consumers' general Internet usage, researchers have also examined motivations for a particular usage on the Internet. In the study of passing along emails, pleasure, affection, inclusion for social interaction, escapism, relaxation, and control (e.g., instrumental communication for attaining something new from outside) were found as consumers' motivations to pass along emails (Phelps et al. 2004). As another new form of advertising on the Internet, consumers' motivations to play advergames, customized online games designed to promote a brand, were explored as follows: escapism, competition, boredom relief, fun, and curiosity (Youn and Lee 2004). Finally, Lee and Lee (2008) had an exploratory study using focus groups and survey to investigate why consumers watch online video ads. They found that consumers want to fulfill relaxation, entertainment, escapism-pass time, social interaction, and control by watching those ads. Table 1 below shows a summary of previous studies related to motivations for advertising media consumption.

Table 1
Previous Motivation Studies

Researcher	Study	Motivations
O'Donohoe (1994)	Advertising usage motivations	•Marketing uses •Structuring time •Enjoyment •Scanning the environment •Social interaction

Table 1 (cont'd)

		•Self-affirmation/transformation
Korgaonkar & Wolin (1999)	Web use	•Social escapism •Transaction-based security and privacy •Information •Interactive control •Socialization •Non-transactional privacy concern •Economic
Ferguson & Perse (2000)	Surfing a Web site	•Entertainment •Pass time •Relaxation •Social information
Papacharissi & Rubin (2000)	Internet usage	•Interpersonal utility •Pass time •Information seeking •Convenience •Entertainment
Stafford & Stafford (2001)	Commercial Web site usage	•Search motivation •Cognitive motivation •New and unique motivation •Social motivation •Entertainment motivation
Kaye & Johnson (2002)	Usage of political information on Web sites	•Guidance •Information seeking/surveillance •Entertainment •Social utility
Rodgers & Sheldon (2002)	Internet usage motives	•Research •Communicate •Shop •Surf
Phelps et al. (2004)	Motivations to pass along emails	•Pleasure •Affection •Inclusion •Escape •Relaxation •Control
LaRose & Eastin (2004)	Internet usage	•Activity outcomes •Monetary outcomes •Novel outcomes •Social outcomes •Self-reactive outcomes •Status outcomes
Youn & Lee (2004)	Playing advergame	•Escapism •Competition •Boredom relief •Fun •Curiosity
Ko, Cho, & Roberts (2005)	Internet usage	•Entertainment •Social interaction •Convenience •Information
Grace-Farfaglia et al. (2006)	Internet gratification	•Social companionship •Economic gain

Table 1 (cont'd)

		•Self-improvement •Entertainment •Escape •Frame and aesthetics
Lee & Lee (2008)	Motivations for watching online video ads	•Relaxation •Entertainment •Escapism-pass time •Social interaction •Control

Based on the review of previous studies on consumers' motivations for the advertising and the Internet usage, we can assume that there are several common motivations for or expected outcomes from watching online video advertising: social interaction, information, relaxation, escapism-pass time, and entertainment. First, social interaction, as a behavioral belief, reflects the subjective probability that watching online video ads would provide interpersonal gratifications from communicating, sharing or discussing issues of the ads with others, which help consumers build or enhance their social relationship (Ferguson and Perse 2000; Korgaonkar and Wolin 2000; O'Donohoe 1994). Second, information, as a behavioral belief, refers to the subjective probability that watching online video ads will help consumers to obtain information and help them search for useful information easily (Korgaonkar and Wolin 2000; Papacharissi and Rubin 2000; Kaye and Johnson 2002). Third, relaxation, as a behavioral belief, refers to the subjective probability that using online video ads will help consumers refresh feelings and take a break (Ferguson and Perse 2000). Fourth, escapism-pass time, as a behavioral belief, indicates the subjective probability that watching online video ads will allow consumers to get away from work and boredom (Ferguson and Perse 2000; Korgaonkar and Wolin 2000; Papacharissi and Rubin 2000; Youn and Lee 2004). Finally, entertainment, as a behavioral belief, is the subjective probability that watching online video ads will help consumers feel amusement and excitement (Ferguson and Perse 2000;

Papacharissi and Rubin 2000; Stafford and Stafford 2001).

The TPB assumes that behavioral beliefs that consumers can access determine attitude toward a behavior (Ajzen 1985, 1991; Madden et al. 1992; Shimp and Kavas 1984). Therefore, as consumers believe that watching online video ads will help them achieve those expected outcomes, they will have a positive attitude toward that behavior. Following the TPB's assumption, we predict that each of these behavioral beliefs for watching online video advertising will be positively related to attitude toward watching online video ads. Thus, the following hypotheses are developed:

H8a: Social interaction will be positively associated with attitude toward watching online video ads.

H8b: Information will be positively associated with attitude toward watching online video ads.

H8c: Relaxation will be positively associated with attitude toward watching online video ads.

H8d: Escapism-pass time will be positively associated with attitude toward watching online video ads.

H8e: Entertainment will be positively associated with attitude toward watching online video ads.

Normative Beliefs and Subjective Norm. Consumers' normative beliefs, the perceived behavioral expectation from important referent individuals or groups, will have a direct impact on subjective norm, the perceived social pressure to comply with the important referents' expectations of watching online video ads (Ajzen 1985, 1991; George 2004; Madden et al. 1992). While the decomposition of normative beliefs based on different referent groups may be appropriate, this study considered referent groups as one dimension consisting of family and friends, because they were assumed to be highly correlated (Taylor and Todd 1995). Also, there is discordance concerning the use of the

multidimensional normative beliefs. Although Lim and Dubinsky (2005) used two dimensions for normative beliefs (i.e., family and friends), Shih and Fang (2004) did not use multidimensional normative beliefs because other researchers failed to identify distinct dimensions within that construct (e.g., Oliver and Bearden 1985; Shimp and Kavas 1984). Given that the TPB predicts a positive relationship between normative beliefs and subjective norm (George 2004; Shih and Fang 2004; Taylor and Todd 1995), this study raises the following hypothesis:

H9: Normative beliefs will be positively associated with subjective norm.

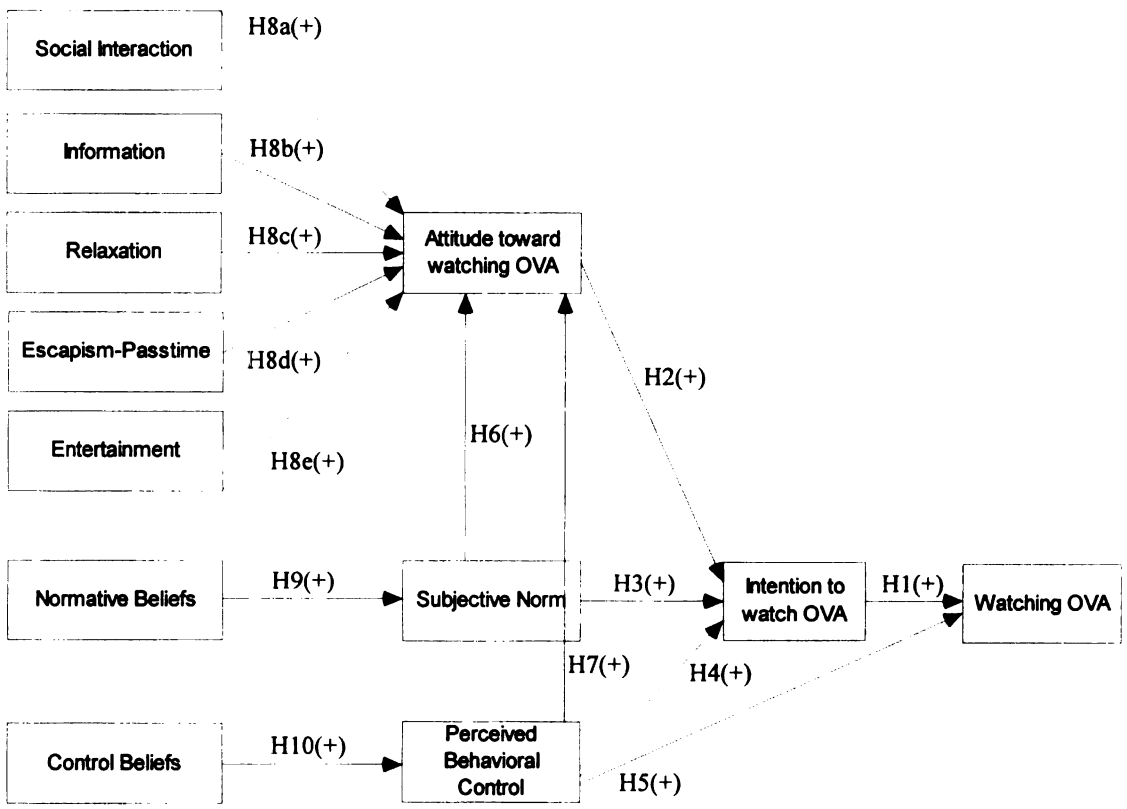
Control Beliefs and Perceived Behavioral Control. One of the most prominent characteristics of online video advertising is that consumers have control over their watching behavior. The TPB makes it possible to examine the role of consumers' control in predicting their intention to watch online video ads. In the current study, control beliefs refer to the perceived presence of requisite resources (e.g., time, computer, Internet access) and opportunities to facilitate or impede watching online video ads; and perceived behavioral control refers to the perceived ability to watch online video ads. According to the TPB, consumers' control beliefs affect perceived behavioral control, which in turn influences an intention and an actual behavior (George 2004; Ajzen and Madden 1986). There has been empirical evidence that control beliefs have a significant relationship with perceived behavioral control (George 2004; Hsu et al. 2006; Shih and Fang 2004; Taylor and Todd 1995). As with normative beliefs, control beliefs were also considered as a unidimensional construct in this study. Generally speaking, an individual with a stronger perception about the presence of resources (time, computer, or the Internet access) and opportunities to watch online video ads is more likely to have a stronger perception about

his or her ability to watch online video ads. Thus, the following hypothesis is put forth:

> **H10:** Control beliefs will be positively associated with perceived behavioral control.

Figure 2 shows all of the hypotheses discussed earlier, including decompositions of the behavioral beliefs and crossover effects among determinants of intention to watch online video ads.

Figure 2
Hypothesized Model



CHAPTER 3

METHOD

Participants and Procedure

In order to examine the relationship between TPB components and college students' use of online video advertising, an online survey was conducted using the WebSurveyor. Online surveys have been used in some of the previous TPB studies: predicting the use of online grocery shopping (Hansen 2008); participation in a Web survey (Lim and Dubinsky 2005); and participation in online auction bidding (Bosnjak et al. 2006).

Undergraduate students at a major Midwestern university were recruited to participate in this study via email. College students are deemed to be appropriate for this study. A research study conducted by Pew Internet and American Life Project (2007) reported that about 76% of young Internet users (those ages 18-29) watch or download online videos. Also, because student samples are homogeneous in nature, they are appropriate for the test of a theory-driven model (Keen 1999). Overall, 322 students participated in the survey. Age of the participants ranged from 19 to 26 years old, with a mean age of 21 years old. Female participants (62.7%) outnumbered male participants (37.3%).

Participants were compensated for their time with extra credit in their courses. After being informed of their rights as study participants, the students were asked to indicate their opinions about and behaviors with respect to online video ads by answering a series of statements. Among the 322 participants, 298 (92.5%) watch online video ads at least once a month. 41% of the participants reported watching online video ads less

than 30 minutes in an average month, and another 29.5% reported watching from 30 minutes to one hour. The participants most frequently watch online video ads on video sharing Web sites ($M = 4.65$ on a seven-point scale), followed by social networking Web sites ($M = 3.51$), portal/news Web sites ($M = 2.87$), and brand Web sites ($M = 2.52$). Additionally, the participants accessed online video ads by actively searching for specific ads on the Internet ($M = 3.88$ on a seven-point scale), by clicking links in emails their friends sent to them ($M = 3.82$), by browsing Web sites accidentally ($M = 3.58$), and by clicking ads posted on friends' social networking Web sites ($M = 3.44$). The participants show a somewhat positive attitude toward online video ads ($M = 4.99$ on a seven-point scale). Moreover, about 61% of the participants passed along online video ads to family and friends at least once a month.

Measurement

To test the hypothesized model of the TPB in the context of online video advertising, a questionnaire (see Appendix) was designed based on the TPB questionnaire construction guidelines developed by Ajzen (2002, 2006), in combination with those of Taylor and Todd (1995) who developed instruments to test a decomposed model of the TPB based on the original scales created by Ajzen and Fishbein (1980) and Ajzen (1985, 1991). Multiple-item scales were used for all variables.

Behavioral Beliefs. Behavioral beliefs in the context of online video advertising refer to the subjective probability that the behavior will achieve outcomes that consumers expect to accomplish when watching online video ads. The construct of behavioral beliefs is one of the main interests in this study in order to explore what kinds of expected outcomes consumers have when watching online video ads and to examine how each of

them influences attitude toward watching online video ads. To measure five decomposed behavioral beliefs of watching online video ads (i.e., social interaction, information, relaxation, escapism-pass time, and entertainment), the strength of each behavioral belief and its corresponding outcome evaluation were measured. Specifically, the strength of social interaction as a behavioral belief (e.g., Watching online video ads will help me to talk to my friends about online video ads) and its outcome evaluation (e.g., For me to watch online video ads to talk to my friends about them is __) were measured by five items. These items were borrowed from Lee and Lee (2008) and Ferguson and Perse (2000), and modified for this study as recommended by Ajzen (2002, 2006). The strength of information (e.g., Watching online video ads will help me to learn about useful things) and its outcome evaluation (e.g., For me to watch online video ads to learn about useful things is __) was measured by five items which were also borrowed from previous studies (Kaye and Johnson 2002; Ko et al. 2005; Korgaonkar and Wolin 1999; Papacharissi and Rubin 2000). Five items borrowed from Ferguson and Perse (2000) were adjusted to the context of online video advertising to measure the strength of relaxation (e.g., Watching online video ads will help me to relax) and its outcome evaluation (e.g., For me to watch online video ads to relax is __). The strength of escapism-pass time (e.g., Watching online video ads will help me to get away from what I'm doing) and its outcome evaluation (e.g., For me to watch online video ads to get away from what I'm doing is __) were also measured by five items borrowed from previous studies and modified for this study (Ferguson and Perse 2000; Korgaonkar and Wolin 1999; Papacharissi and Rubin 2000). Finally, the strength of behavioral belief of entertainment (e.g., Watching online video ads will help me to be entertained) and its outcome evaluation (e.g., For me to watch online video ads

to be entertained is __) were measured by five items, which were also borrowed (Ferguson and Perse 2000) and modified for this study.

The strength of each behavioral belief was assessed on a seven-point scale ranging from "extremely unlikely (1)" to "extremely likely (7)." The outcome evaluation of each expected outcome was measured on a seven-point scale ranging from "extremely bad (1)" to "extremely good (7)." To compute the decomposed behavioral beliefs, the strength of each behavioral belief was multiplied by its corresponding outcome evaluation, and the resulting products were summed for each outcome factor (i.e., $\sum b_i e_i$ for each outcome factor) (Ajzen 1991).

After collecting the data, an exploratory factor analysis (EFA) using the principal components analysis and Varimax rotation was run over 25 computed behavioral belief items. In order to select items to be included in each factor, three criteria were cross-referenced: 1) a cut point of factor loading of .40 or higher, 2) no significant cross loading, and 3) corrected item-total correlation of .30 or higher. After eliminating two computed items (i.e., "Watching online video ads will help me to find unique ads and it is good" and "Watching online video ads will help me to enjoy and it is good"), an EFA was conducted again over the remaining 23 items. This analysis generated five factors that accounted for 76.89% of the total variance: social interaction, information, relaxation, escapism-pass time, and entertainment. All items were loaded as expected, except for one item. The item "Watching online video ads will help me to watch ads that created buzz around and it is good (b5e5)" was expected to load to the entertainment factor (Lee and Lee 2008), however, it was loaded to the social interaction factor. Each factor had an eigenvalue above 1.0. Cronbach alphas of all five factors ranged from .85 to .93. Table 2

summarizes the result of the EFA.

Table 2
EFA Results of Behavioral Beliefs for Watching Online Video Advertising

Behavioral Belief Items $\sum b_i e_i$	Factor loading	% of variance	Alpha
Factor 1: Social Interaction		18.66	.93
b1e1. Watching online video ads will give me an opportunity to watch the online video ads that my friends tell me about and it is good	.78		
b2e2. Watching online video ads will help me to talk to my friends about online video ads and it is good	.76		
b3e3. Watching online video ads will help me to talk with others about the online video ads I find and it is good	.72		
b4e4. Watching online video ads will help me to tell people about the online video ads I like and it is good	.70		
b5e5. Watching online video ads will help me to watch ads that created buzz around and it is good	.68		
b6e6. Watching online video ads will help me to watch specific ads that my friends send me links to and it is good	.68		
Factor 2: Information		17.44	.91
b7e7. Watching online video ads will help me to learn about unknown things and it is good	.81		
b8e8. Watching online video ads will help me to get information for free and it is good	.81		
b9e9. Watching online video ads will help me to obtain information easily and it is good	.79		
b10e10. Watching online video ads will help me to learn about things happening in the world and it is good	.75		
b11e11. Watching online video ads will help me to learn about useful things and it is good	.70		
Factor 3: Relaxation		17.03	.91
b12e12. Watching online video ads will help me to unwind and it is good	.75		
b13e13. Watching online video ads will help me to pep me up and it is good	.74		
b14e14. Watching online video ads will help me to relax and it is good	.69		
b15e15. Watching online video ads will help me to have a pleasant rest and it is good	.68		
b16e16. Watching online video ads will help me to be thrilled and it is good	.63		
Factor 4: Escapism-Pass time		16.97	.92
b17e17. Watching online video ads will help me to forget about school, work or other things and it is good	.75		
b18e18. Watching online video ads will give me an opportunity to do something when I have nothing better to do and it is good	.74		
b19e19. Watching online video ads will give me something to occupy my time and it is good	.73		

Table 2 (cont'd)

b20e20. Watching online video ads will help me to get away from what I'm doing and it is good	.72		
b21e21. Watching online video ads will help me to pass the time away, particularly when I am bored and it is good	.68		
Factor 5: Entertainment		6.79	.85
b22e22. Watching online video ads will help me to be amused and it is good	.68		(r=.75)
b23e23. Watching online video ads will help me to be entertained and it is good	.61		
Cumulative % of variance		76.89	

The first factor, labeled "social interaction," accounted for 18.66% of the variance of six items (α = .93). Social interaction as a behavioral belief reflects the subjective probability that watching online video ads would provide interpersonal gratifications from communicating, sharing or discussing issues of the ads with others, which help consumers build or enhance their social relationship. The second factor, labeled "information," consisted of five items and explained 17.44% of the variance (α = .91). This factor delineates the subjective probability that watching online video ads will help consumers obtain information and search for useful information easily. The third factor, labeled "relaxation," included five items representing the subjective probability that using online video ads will help consumers refresh feelings and take a break (α = .91). This factor accounted for 17.03% of the variance. The fourth factor, named "escapism-pass time," was accounted for 16.97% of the variance with five items (α = .92). This factor refers to the subjective probability that watching online video ads will allow consumers to get away from work and boredom. The final factor, labeled "entertainment," accounted for 6.79% of the variance with two items (α = .85, r = .75). This factor refers to the subjective probability that watching online video ads will help consumers feel amusement and excitement.

Normative Beliefs. Normative beliefs in the context of online video advertising

refer to the perceived behavioral expectation from important referent individuals or groups influencing consumers' watching of online video ads. Considering participants' status as college students, four referent groups that would influence the participants' watching of online video ads were indentified: others whom participants see as important, close friends, classmates, and opinion leaders. To measure normative beliefs, the strength of each normative belief (e.g., My close friends think that I should watch online video ads) and motivation to comply with each referent (e.g., Generally speaking, how much do you care what your close friends think you should watch online video ads?) were measured. Four items assessing the strength of normative beliefs and motivation to comply were borrowed from Ajzen (2002, 2006). The strength of normative beliefs was measured on a seven-point scale ranging from "extremely unlikely (1)" to "extremely likely (7)." Motivation to comply was measured on a seven-point scale ranging from "not at all (1)" to "very much (7)." To compute overall normative beliefs, the strength of each normative belief was multiplied by motivation to comply with each referent, and the resulting products were summed across all items of referent groups (Ajzen 1991) (α = .96). Table 3 shows all items for the strength of normative beliefs and motivation to comply with referents.

Table 3
Items for Normative Beliefs of Watching Online Video Advertising

	Normative Belief Items (Normative Belief $=\sum n_i m_i$)
Normative Beliefs	**n1.** People who are important to me think that I should watch online video ads **m1.** Generally speaking, how much do you care what others who are important to you think you should watch online video ads? **n2.** My close friends think that I should watch online video ads **m2.** Generally speaking, how much do you care what your close friends think you should watch online video ads? **n3.** My classmates think that I should watch online video ads

Table 3 (cont'd)

	m3. Generally speaking, how much do you care what your classmates think you should watch online video ads? **n4.** People whose opinions I value think that I should watch online video ads **m4.** Generally speaking, how much do you care what people whose opinions you value think you should watch online video ads?

Control Beliefs. Control beliefs in the context of online video advertising refer to the perceived presence of requisite resources (e.g., time, computer, Internet access) and opportunities to facilitate or impede watching online video ads. To measure control beliefs, two factors which represent characteristics of user control were first identified: self-efficacy and facilitating conditions. Self-efficacy refers to the extent of personal confidence in having the ability to perform a behavior, and facilitating conditions refer to the extent of resource constraints (Ajzen 1991; Lim and Dubinsky 2005; Taylor and Todd 1995). As with other belief components, to measure control beliefs, the strength of each control belief and perceived power of each control factor were measured. Specifically, four items assessing self-efficacy (i.e., "If I wanted to, I could easily operate online video ads on my own" for the strength of a control belief; "Being able to operate online video ads on my own is __" for perceived power of a control factor) and three items representing facilitating conditions (i.e., "I have access to the Internet whenever I want to watch online video ads" for the strength of a control belief; "Having access to the Internet whenever I want to watch online video ads is __" for perceived power of a control factor) were borrowed from Taylor and Todd (1995) and modified for this study .

The strength of each control belief was measured on a seven-point scale ranging from "unlikely (1)" to "likely (7)." The perceived power of each control factor was measured on a seven-point scale ranging from "unimportant (1)" to "important (7)." To compute overall control beliefs, the strength of each control belief was multiplied by

perceived power of each control factor, and the resulting products were summed across all items (Ajzen 1991; Taylor and Todd 1995) (α = .92). Table 4 shows all items for the strength of control beliefs and perceived power of control factors.

Table 4
Items for Control Beliefs of Watching Online Video Advertising

	Control Belief Items (**Control Belief** $=\sum c_i p_i$)
Control Beliefs	**c1.** If I wanted to, I could easily operate online video ads on my own **p1.** Being able to operate online video ads on my own is **c2.** I know enough to watch online video ads on my own **p2.** Knowing enough to watch online video ads on my own is **c3.** I would feel comfortable watching online video ads on my own **p3.** Being comfortable watching online video ads on my own is **c4.** I would be able to watch online video ads even if there is no one around to tell me how to watch it **p4.** Being able to watch online video ads even if no one is around to tell me how to watch it is **c5.** I have access to the Internet whenever I want to watch online video ads **p5.** Having access to the Internet whenever I want to watch online video ads is **c6.** I have a computer whenever I want to watch online video ads **p6.** Having a computer whenever I want to watch online video ads is **c7.** I have the time needed to watch online video ads **p7.** Having the time needed to watch online video ads is

Attitude toward Watching Online Video Ads (A_{OVA}). Four items to measure attitude toward watching online video ads were taken from Ajzen (2002, 2006). These items were measured on seven-point scales, anchored with "extremely bad - extremely good," "extremely worthless - extremely valuable," "extremely unpleasant - extremely pleasant," and "boring - interesting." The items were averaged to create an overall attitude toward watching online video ads index (α = .89).

Subjective Norm (SN). Subjective norm in the context of online video advertising refers to the perceived social pressure to comply with the important referents'

expectations of watching online video ads. Five items were taken from Ajzen (2002, 2006) and modified for this study to measure subjective norm. Four of these items (e.g., "Most people who are important to me think that I should watch online video ads") were assessed on a seven-point scale ranging from "definitely false (1)" to "definitely true (7)." The fifth item (e.g., "Most people whose opinions I value would approve of my watching online video ads") was assessed on a seven-point scale ranging from "strongly disagree (1)" to "strongly agree (7)" The items were averaged to create an overall subjective norm index ($\alpha = .85$).

Perceived Behavioral Control (PBC). Perceived behavioral control in the context of online video advertising refers to the perceived ability to watch online video ads. Four items measuring perceived behavioral control were taken from Ajzen (2002, 2006) and modified for this study. The statement, "For me to watch online video ads is __," was used to measure two of these items. This statement was assessed on seven-point scales anchored with "extremely difficult - extremely easy" and "impossible - possible." The third item was measured by using the following statement, "Whether or not I watch online video ads is completely up to me." This item was measured on a seven-point scale ranging from "strongly disagree (1)" to "strongly agree (7)." The last item was assessed by using the statement, "How much control do you believe you have over watching online video ads?" It was measured on a seven-point scale anchored with "no control - complete control." The items were averaged to create an overall perceived behavioral control index ($\alpha = .74$).

Intention to Watch Online Video Ads (I_{OVA}). Intention to watch online video ads was measured by four items taken from Ajzen (2002, 2006) and modified for this study.

The first statement, "I plan to watch online video ads," was assessed on a seven-point scale ranging from "extremely unlikely (1)" to "extremely likely (7)." The second statement, "I am confident that if I wanted to I could watch online video ads," was measured on a seven-point scale ranging from "definitely false (1)" to "definitely true (7)." The third statement, "I will make an effort to watch online video ads," was assessed on a seven-point scale ranging from "I definitely will not (1)" to "I definitely will (7)." The final statement, "I intend to watch online video ads," was assessed on a seven-point scale ranging from "strongly disagree (1)" to "strongly agree (7)." The items were averaged to create an overall intention to watch online video ads index ($\alpha = .83$).

Frequency of Watching Online Video Ads (W_{OVA}). As an actual behavior in the TPB model, the frequency of watching online video ads was measured, with six responses including, 'none,' '1-2 times per month,' '3-4 times per month,' '5-6 times per month,' 'every day,' and 'more than once a day.'

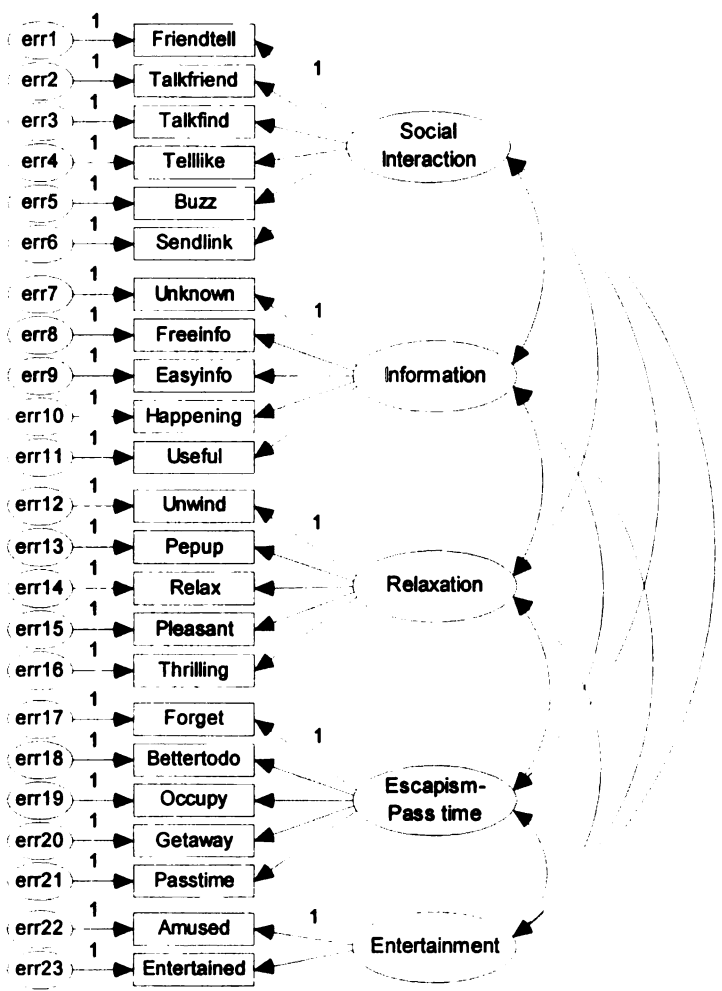
CHAPTER 4

RESULTS

Measurement Model of Behavioral Beliefs

Confirmatory factor analysis (CFA) was conducted using AMOS 7.0 to confirm the dimensions of behavioral beliefs obtained by the EFA. If the measurement is identified as significant, it can be used to explore path models related to those dimensions (Brown 2006; Bruce 2004). Figure 3 shows an overview of the CFA model for behavioral beliefs for watching online video advertising.

Figure 3
CFA Model of Behavioral Beliefs for Watching Online Video Advertising



* One item for each construct was fixed at 1.00.

The results of the CFA demonstrated that all of the five dimensions of behavioral beliefs for watching online video ads, social interaction, information, relaxation, escapism-pass time, entertainment, were well specified. Although the chi-square test (χ^2 = 627.536, df = 220, $p < .001$) rejected a perfect absolute fit between the data and the model, it is widely known that the chi-square test is sensitive to the influence of sample size (Brown 2006; Byrne 2001; Hair et al. 1998). Other indices of model fit, such as normed fit index (NFI) and comparative fit index (CFI) were over .90, indicating a good fit of the CFA model (Bentler 1990, 1992; Bruce 2004). Also, the estimate of the root mean square error of approximation (RMSEA) was below .08, indicating a reasonable degree of fit of the measurement model (Browne and Cudeck 1993; Byrne 2001; Hansen 2008). All standardized factor loadings in the measurement model were significant ($p < .001$). All items were loaded on the same dimensions that obtained by the EFA. All reliability estimates for each dimension were the same, ranging from .85 to .93. In sum, the five dimensions of behavioral beliefs obtained earlier were confirmed as the decomposed dimensions of behavioral beliefs, and they can therefore be used as the measurement model in the hypothesized model. Table 5 summarizes the results of the CFA.

Table 5
CFA Results of Behavioral Beliefs for Watching Online Video Advertising

Behavioral Belief Items $\sum b_i e_i$	Standardized Factor loading	t-value	Alpha
Factor 1: Social Interaction			.93
b1e1. Watching online video ads will give me an opportunity to watch the online video ads that my friends tell me about and it is good	.85	–a	
b2e2. Watching online video ads will help me to talk to my friends about online video ads and it is good	.84	19.12***	
b3e3. Watching online video ads will help me to talk with others about the online video ads I find and it is good	.88	20.61***	
b4e4. Watching online video ads will help me to tell people	.89	21.20***	

Table 5 (cont'd)

about the online video ads I like and it is good			
b5e5. Watching online video ads will help me to watch ads that created buzz around and it is good	.79	17.19***	
b6e6. Watching online video ads will help me to watch specific ads that my friends send me links to and it is good	.73	15.36***	
Factor 2: Information			.91
b7e7. Watching online video ads will help me to learn about unknown things and it is good	.81	–a	
b8e8. Watching online video ads will help me to get information for free and it is good	.85	17.51***	
b9e9. Watching online video ads will help me to obtain information easily and it is good	.90	18.94***	
b10e10. Watching online video ads will help me to learn about things happening in the world and it is good	.77	15.35***	
b11e11. Watching online video ads will help me to learn about useful things and it is good	.78	15.65***	
Factor 3: Relaxation			.91
b12e12. Watching online video ads will help me to unwind and it is good	.88	–a	
b13e13. Watching online video ads will help me to pep me up and it is good	.82	19.49***	
b14e14. Watching online video ads will help me to relax and it is good	.89	22.53***	
b15e15. Watching online video ads will help me to have a pleasant rest and it is good	.79	18.09***	
b16e16. Watching online video ads will help me to be thrilled and it is good	.75	16.75***	
Factor 4: Escapism-Pass time			.92
b17e17. Watching online video ads will help me to forget about school, work or other things and it is good	.74	–a	
b18e18. Watching online video ads will give me an opportunity to do something when I have nothing better to do and it is good	.87	16.05***	
b19e19. Watching online video ads will give me something to occupy my time and it is good	.85	15.59***	
b20e20. Watching online video ads will help me to get away from what I'm doing and it is good	.79	14.36***	
b21e21. Watching online video ads will help me to pass the time away, particularly when I am bored and it is good	.88	16.16***	
Factor 5: Entertainment			.85
b22e22. Watching online video ads will help me to be amused and it is good	.83	–a	(r=.75)
b23e23. Watching online video ads will help me to be entertained and it is good	.90	18.49***	

[a] One item for each construct was fixed at 1.00.

***$p < .001$

	Goodness-of-fit Statistics
χ^2 (degree of freedom)	627.536 (220)
RMSEA	.076
GFI	.841
NFI	.905
CFI	.936

Hypotheses Tests

In order to test the hypotheses, a path analysis was run using AMOS 7.0. Some fit indices for the model were acceptable (χ^2 = 186.600, df = 31, p < .001; GFI = .924; NFI = .931; CFI = .941). However, the RMSEA value (.125) was outside the range of acceptability (< .05 to .08) recommended for a good model fit (Byrne 2001).

H1 stated that I_{OVA} would have a positive impact on the frequency of watching online video ads (W_{OVA}). As expected, I_{OVA} had a positive effect on W_{OVA} (γ = .47, p < .001). Thus, H1 was supported.

H2 to H4 predicted the positive impacts of three determinants, A_{OVA}, SN, and PBC, on intention to watch online video ads (I_{OVA}). The results demonstrated that each determinant had a significant positive relationship with I_{OVA}: A_{OVA} (γ = .59, p < .001), SN (γ = .27, p < .001), and PBC (γ = .09, p < .05). Additionally, H5 predicted the positive impact of PBC on the frequency of watching online video ads. Contrary to our expectation, PBC had a negative influence on W_{OVA} (γ = -.13, p < .05). Thus, H2, H3, and H4 were supported, while H5 was rejected.

Hypotheses 6 and 7 predicted crossover effects from SN and PBC to A_{OVA}, respectively. As expected, SN showed a positive relationship with A_{OVA} (γ = .32, p < .001). Similarly, PBC resulted in a positive relationship with A_{OVA} (γ = .23, p < .001). Hence, H6 and H7 were supported.

Hypotheses 8a to 8e stated that each behavioral belief for watching online video ads would be positively associated with attitude toward watching online video ads (A_{OVA}). Among the five decomposed behavioral beliefs, information (γ = .20, p < .001), relaxation (γ = .20, p < .001), and entertainment (γ = .21, p < .001) had positive impacts

on A_{OVA}. However, social interaction ($\gamma = .03$, n.s.) and escapism-pass time ($\gamma = .05$, n.s.) showed no significant relationship with A_{OVA}. Thus, H8b, H8c, and H8e were supported, while H8a and H8d were not.

Finally, H9 stated that normative beliefs would have a positive relationship with subjective norm (SN), and H10 predicted a positive relationship between control beliefs and perceived behavioral control (PBC). As expected, the results showed a significant positive impact of normative beliefs on SN ($\gamma = .67, p < .001$) and a significant positive impact of control beliefs on PBC ($\gamma = .39, p < .001$). Therefore, H9 and H10 were supported.

The results of all hypotheses tests are reported in Table 6 and Figure 4.

Table 6
The Results of Path Analysis

Hypotheses	Paths			Standardized Path Coefficients	Standard error	t-values
H1	I_{OVA}	→	W_{OVA}	.473	.050	8.903***
H2	A_{OVA}	→	I_{OVA}	.586	.048	13.607***
H3	SN	→	I_{OVA}	.274	.037	6.884***
H4	PBC	→	I_{OVA}	.089	.047	2.412*
H5	PBC	→	W_{OVA}	-.129	.064	-2.430*
H6	SN	→	A_{OVA}	.315	.029	9.187***
H7	PBC	→	A_{OVA}	.225	.036	7.001***
H8a	Social Interaction	→	A_{OVA}	.029	.006	.545
H8b	Information	→	A_{OVA}	.198	.005	4.433***
H8c	Relaxation	→	A_{OVA}	.200	.006	3.426***
H8d	Escapism-Pass time	→	A_{OVA}	.053	.006	.951
H8e	Entertainment	→	A_{OVA}	.205	.005	3.952***
H9	Normative Beliefs	→	SN	.669	.005	16.125***
H10	Control Beliefs	→	PBC	.389	.004	7.576***

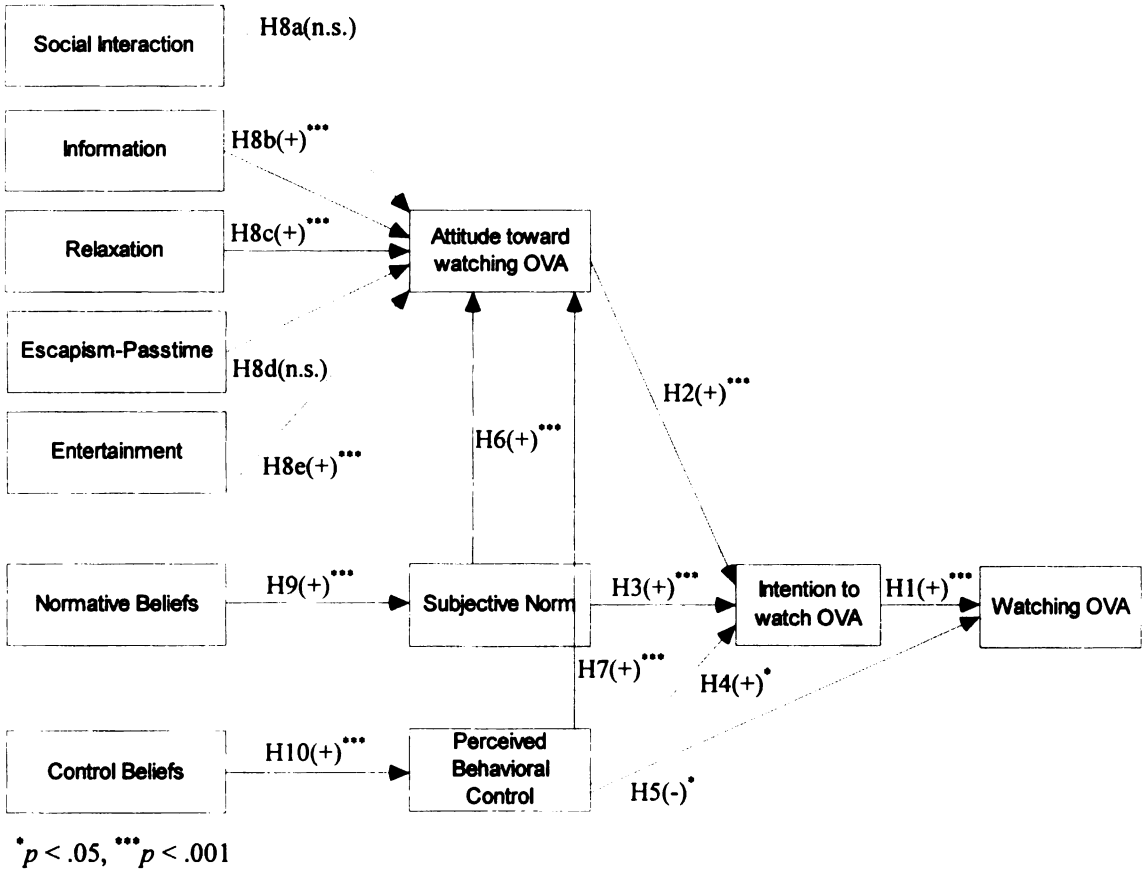
*$p < .05$, ***$p < .001$

Goodness-of-fit Statistic	
χ^2 (degree of freedom)	186.600 (31)
RMSEA	.125

Table 6 (cont'd)

GFI	.924
NFI	.931
CFI	.941

Figure 4
Results of Hypothesized Model



Modification of Hypothesized Model

Although some indices, such as GFI, NFI and CFI, indicated a good fit for the hypothesized model, the RMSEA value was too high. A review of modification indices helps not only identify some misfit in the model but also improve the overall model fit (Byrne 2001). To improve the fit of the research model, the hypothesized model was modified according to the result of modification indices. Because this study's goal was to

investigate causal paths of the model, only subsets of indices associated with the regression weights were considered. To modify the hypothesized model, three criteria were used: 1) a thorough knowledge of the substantive theory, 2) an adequate assessment of statistical criteria based on information pooled from various indices of fit, and 3) a watchful eye on parsimony (Byrne 2001).

As a result of modification, three paths were added to the hypothesized model. These include the paths from social interaction to SN, entertainment to both SN and PBC. The path from social interaction to SN made sense in that social interaction reflects a behavioral belief that watching online video ads will help consumers to belong to their social community. The desire to belong to the social community may give consumers social pressure to watch (or not watch) online video ads. The entertainment value has been found in various media usage contexts as a factor that motivates and maintains consumers' active consumption of the media in question (Ferguson and Perse 2000; Papacharissi and Rubin 2000; Stafford and Stafford 2001; Stephenson 1988). In the context of online video advertising, entertainment can generate a positive emotional response (when ads stimulate consumers' senses), social pressure (when consumers talk about the ad post-exposure), and perceived behavioral control (when consumers feel more involved because they are expecting to be entertained). Thus, it can be assumed that entertainment will influence all determinants of intention to watch online video ads.

Adding the crossover effects to the hypothesized model significantly improved the model. The overall fit for the modified model was acceptable ($\chi^2 = 87.455$, df = 28, $p < .001$; RMSEA = .081; GFI = .962; NFI = .968; CFI = .978). Specifically, the RMSEA value was reduced from .125 to .081, which is close to the recommended range of

acceptability (< .05 to .08). When comparing the modified model to the hypothesized model, the findings of the hypothesized paths obtained earlier remained the same in the modified model. Regarding the three added paths, the first added path indicated a positive relationship between social interaction and SN ($\gamma = .20, p < .001$). The other two added paths also showed positive impacts of entertainment on SN ($\gamma = .16, p < .01$) and PBC ($\gamma = .34, p < .001$).

Table 7 and Figure 5 show the results of the path analysis for the modified model.

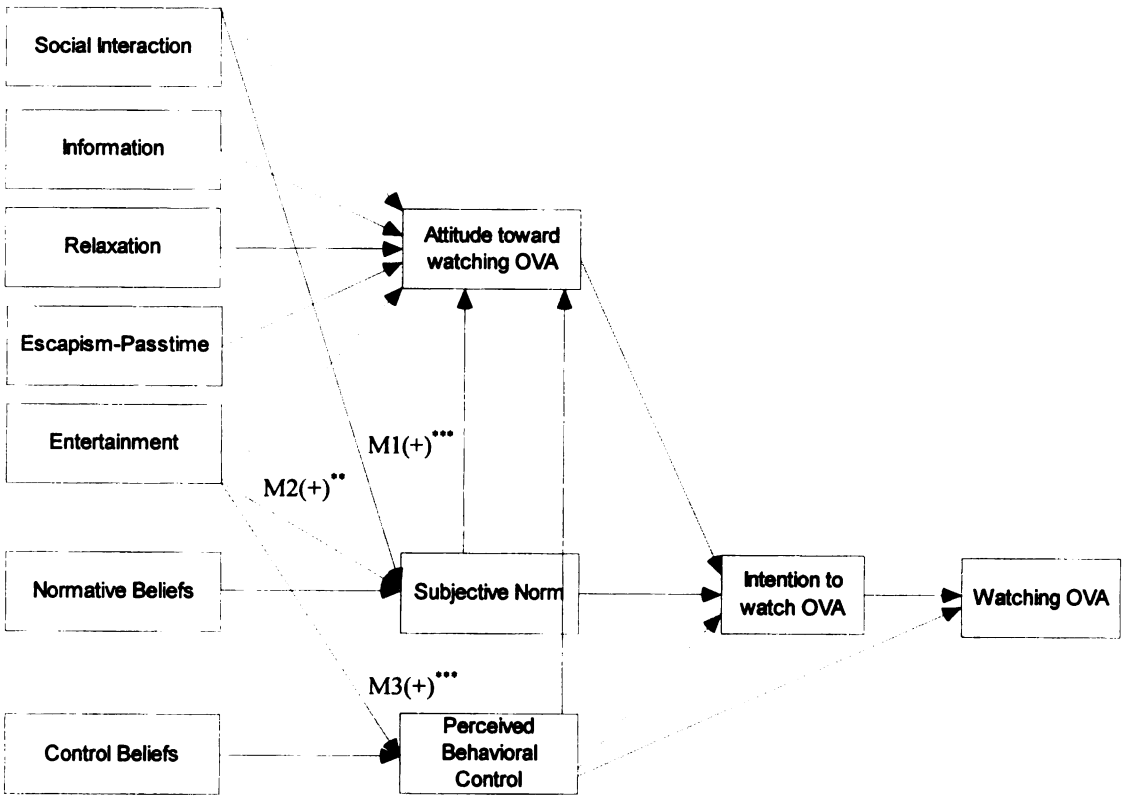
Table 7
The Results of Modified Path Analysis

Hypotheses	Paths			Standardized Path Coefficients	Standard error	t-values
H1	I_{OVA}	→	W_{OVA}	.501	.049	9.024***
H2	A_{OVA}	→	I_{OVA}	.592	.052	12.524***
H3	SN	→	I_{OVA}	.257	.042	6.135***
H4	PBC	→	I_{OVA}	.083	.050	2.249*
H5	PBC	→	W_{OVA}	-.128	.067	- 2.307*
H6	SN	→	A_{OVA}	.292	.033	8.072***
H7	PBC	→	A_{OVA}	.208	.040	6.409***
H8a	Social Interaction	→	A_{OVA}	.027	.006	.538
H8b	Information	→	A_{OVA}	.183	.005	4.438***
H8c	Relaxation	→	A_{OVA}	.185	.006	3.447***
H8d	Escapism-Pass time	→	A_{OVA}	.049	.006	.951
H8e	Entertainment	→	A_{OVA}	.190	.005	3.863***
H9	Normative Beliefs	→	SN	.548	.005	13.540***
H10	Control Beliefs	→	PBC	.220	.005	3.931***
M1	Social Interaction	→	SN	.202	.007	3.580***
M2	Entertainment	→	SN	.161	.006	2.936**
M3	Entertainment	→	PBC	.344	.005	6.163***

M: modified paths
*$p < .05$, **$p < .01$, ***$p < .001$

	Goodness-of-fit Statistic
χ^2 (degree of freedom)	87.455 (28)
RMSEA	.081
GFI	.962
NFI	.968
CFI	.978

Figure 5
Modification of Hypothesized Model



M: modified path

$^{**}p < .01$, $^{***}p < .001$

CHAPTER 5

DISCUSSION AND CONCLUSION

It is evident that some consumers have increased skepticism and negative attitudes toward advertising in general. These perceptions may be the result of escalated ad clutter on TV (Dahlén and Edenius 2007; Zanot 1984) and also of annoying pop-up or banner ads on the Internet (Cho and Cheon 2004). Online video advertising is an emerging form of interactive advertising and is different from traditional advertising in that it provides consumers with active control and requires active watching behavior. With the growing popularity of online video ads among Internet users and the increasing number of Web platforms such as YouTube and Facebook that support online video advertising, examining factors that influence consumers' use of online video advertising, based on a solid theory, contributes to academic research and the advertising industry. With this in mind, this study used the TPB to predict consumers' use of online video ads. Specifically, this study examined factors that may influence consumers' intention to watch online video ads because intention is a strong forecaster of an actual behavior. Moreover, by decomposing behavioral beliefs into several outcomes expected from watching online video ads, the present study investigated what kinds of expected outcomes were related to attitude toward watching online video ads, which in turn affected consumers' intention to watch them. This study is important in that it is among the *first* attempts to examine factors that can predict consumers' use of online video ads, as well as the relationships among those influencing factors.

Predicting Consumers' Intention and Frequency of Watching Online Video Ads

One benefit of the TPB is that it helps predict specific behaviors by concentrating

on the relationship between intention and behavior. The findings of this study demonstrated that intention to watch online video ads positively influenced the frequency of watching them. When consumers' intention to watch online video ads was higher, they actually watched them more frequently.

It was also found that the three determinants of intention to watch online video ads (attitude toward watching, subjective norm, and perceived behavioral control) positively influenced intention to watch online video ads. Specifically, the more positive consumers' attitude toward watching were, the more they were concerned about social pressure from important referents, and the more they were confident in their ability to access and their resources to watch these ads, the greater their intention to watch online video ads was. Moreover, the findings of this study demonstrated the significant crossover effects between determinants of intention: the effect of subjective norm on attitude toward watching online video ads and that of perceived behavioral control on attitude. The findings, that subjective norm and perceived behavioral control influenced attitude, which then influenced intention, support the findings of previous studies that attitude toward a behavior is the strongest indicator of intention to perform the behavior in question (e.g., Bosnjak et al. 2006; Gopi and Ramayah 2007; Hansen 2008; Lim and Dubinsky 2005). These findings suggest that advertisers should aim to improve consumers' evaluative assessment of watching online video ads (attitude) and take into account the influence of referent groups (subjective norm) if they wish to motivate consumers to watch online video ads. In addition, advertisers should consider the degree of consumers' perceived behavioral control when they choose Web platforms on which to display their ads.

Besides the indirect influences of perceived behavioral control on the frequency of watching online video ads through intention, there was also a significant direct influence of perceived behavioral control on the frequency of watching. Interestingly, while the effects of the indirect influence of perceived behavioral control on the frequency of watching online video ads was positive, the direct influence was negative. In other words, this finding suggests that, as consumers increase their perception that they are able to watch online video ads, they are less likely to watch. Similarly, Madden et al. (1992) found that target behaviors in their study were inversely associated with the degree of consumers' perceived behavioral control. This relationship is noteworthy because it suggests that when consumers perceive *too* much control while watching an ad, it is possible the user controls become confusing. This causes consumers to doubt themselves and their ability to operate the ad, which therefore decreases the frequency of watching.

Belief Structures and Their Influences

The findings of this study also showed that each belief structure, i.e., behavioral beliefs, normative beliefs, and control beliefs, affects its corresponding determinant of intention, i.e., attitude toward watching online video ads, subjective norm, and perceived behavioral control, respectively.

Expected outcomes of performing a given behavior motivate consumers to perform that behavior (Dobos 1992; Lin 1999). It was assumed that expected outcomes (behavioral beliefs) for watching online video ads play a significant role in triggering consumers' intention to watch online video ads by influencing their attitude toward watching. The review of the relevant literature identified, and this study confirmed, five

distinct expected outcomes of watching online video ads: social interaction, information, relaxation, escapism-pass time, and entertainment. These categories suggest that consumers expect both independent (i.e., information, relaxation, escapism-pass time, entertainment) and interdependent (i.e., social interaction) gratifications when watching online video ads.

Further, this study found that in the case of some expected outcomes, the more consumers believe that watching online video ads will produce a given expected outcome, the more positive their attitudes toward watching online video ads are. Specifically, consumers who believe that watching online video ads will help them obtain *information* tend to have a more positive attitude toward watching online video ads. This makes sense; one of the functions of advertising in general is providing information about products or services to consumers (Pollay and Mittal 1993). This study suggests that, as with advertising in general, consumers are more likely to have a positive attitude toward watching online video ads if they believe online video ads serve the information function. Additionally, as expected, a positive influence of *relaxation* on attitude toward watching online video ads was found; it was concluded that when consumers believe that watching online video ads is relaxing, they tend to consider it a favorable activity.

Contrary to information and relaxation, *escapism-pass time* did not show a significant relationship with attitude toward watching. This finding suggests that consumers' beliefs that watching online video ads will help them get away from work and boredom do not necessarily increase their attitude toward watching online video ads. Unexpectedly, s*ocial interaction* also lacked a significant relationship with attitude toward watching online video ads. It did, however, have a positive influence on

subjective norm. In other words, the more consumers believe that watching online video ads will help them interact with others, the greater the social pressure that consumers feel. In retrospect, these results make sense in that both social interaction and subjective norm emphasize interdependent relationships. Because of this emphasis, consumer's attitudes toward watching might not have been significantly affected by social interaction; expectations of social interaction reflect their feelings toward social situations in general, as opposed to their feelings about the act of watching an advertisement. Thus, consumers' expectations of social interaction when watching online video ads might have been correlated only with subjective norm, and not with attitude toward watching.

Entertainment, on the other hand, did have a positive impact on attitude. Previous studies have found the entertainment expectation to be a strong predictor of consumers' attitudes toward media (Stafford and Stafford 2001; Youn and Lee 2004). Lee and Lee (2008) noted that the entertainment motivation had a strong, positive influence on attitude specifically in the context of online video ads. Therefore, if advertisers wish to positively affect consumers' attitudes, and thus positively influence their intention to watch, enhancing the entertainment aspect of their ads will be an effective way to achieve their goal. Entertainment also exhibited a positive association with subjective norm, and perceived behavioral control. When consumers expect to be entertained, they are more likely to talk about the ads to referent groups or people and get them excited about watching them; once referents groups support watching behavior, consumers feel social pressure to watch, which increases the likelihood they actually will. The expectation of entertainment causes consumers to actively involve themselves in watching online video ads, and thus perceive having more control over the situation, and therefore, the behavior itself.

Normative beliefs were also found to positively influence subjective norm. Specifically, the positive relationship between normative beliefs and subjective norm suggests that consumers tend to feel more social pressure to watch online video ads when they believe that important referents want them to. Advertisers will benefit from identifying the influential referent groups of their target consumers and encouraging them to serve as volunteer agents for word-of-mouth referrals or viral marketing, defined as "making email into a form of advocacy or word-of-mouth referral endorsement from one client to other prospective clients" (Dobele, Toleman, and Beverland 2005, p. 144). Also, advertisers can upload their online video ads to a specific online group, which plays a referent role for a target generation of consumers, because consumers involved in the group may feel pressure to watch the ads.

Finally, the last belief structure, control beliefs, reflects the extent of consumers' ability to operate the ads, including the amount of available resources in the context of online video ads. The results of this study showed that more available resources (i.e., access or time to watch online video ads) let consumers perceive themselves as having a greater ability to operate the ads or as having more control over them. Thus, when uploading ads to Web platforms, advertisers need to consider consumers' ability to operate the ads on the Web platforms they choose. A Web site that offers more control options (i.e., play, stop, rewind, etc.) is a better choice because it will positively influence consumers' perceived behavioral control. Also, knowledge concerning which resources are the most limited for their target consumers will help advertisers develop effective online video ads. For instance, college students are more likely to think of time to watch as a limited resource than Internet access, so if they are the target consumers, keeping the

ads short is a good way to address control beliefs and perceived behavioral control.

Implications

Overall, the current study has both theoretical and practical implications. First, while some previous studies have explored expected outcomes and their influences on the media and on advertising, few studies have applied the TPB to understand various factors that influence intention and an actual behavior in the field of advertising. With the decomposed behavioral beliefs and crossover effects added to the TPB model, future researchers will be able to build a stronger and more comprehensive theoretical model of factors influencing consumers' watching of online video ads.

This study also provides insight to advertisers about how to utilize online video advertising as an effective communication tool, by taking into consideration the factors that will influence consumers' intention to watch and their actual viewing of online video ads. Additionally, while the original model of the TPB is a valuable framework, the decomposed model of the TPB offers more significant data to advertisers. Guidelines used by advertisers to create their ads are better outlined using the decomposed model of the TPB because it suggests different components of advertising strategies that could be executed to influence consumers' belief structures (Taylor and Todd 1995). Although advertisers cannot control every component that affects consumers' watching of online video ads, they can develop their online video ads to satisfy specific expected outcomes. This study identified the five expected outcomes that consumers consider before actually watching online video ads, and advertisers can use this information to their advantage.

Limitations and Future Research

While this study is among the first to provide a full examination of the

relationships between belief structures and determinants of intention, as well as the relationship between intention and the frequency of watching online video ads, it is not without its limitations. First, although five expected outcomes of watching online video ads were identified based on previous literature concerning studies on motivation, there may be other outcomes that consumers expect out of watching online video ads. A more qualitative research method, such as in-depth interviews, might provide more information about other possible expected outcomes. Second, this study was limited in that when measuring actual behavior (i.e., watching online video ads), only one indicator was measured (frequency). Although frequency of watching online video ads reflects consumers' actual watching behavior, there are other measurements to be considered, such as time spent watching. Future research measuring various indicators of consumer's watching of online video ads would further benefit the literature.

Third, although the TPB is a frequently used framework to study a particular behavior, however, it assumes a linear compensatory (i.e., step by step) approach (Taylor and Todd 1995), which does not allow investigation of other paths between beliefs and intention or behavior. Due to this theoretical limitation, the obtained result may not necessarily reflect the complex nature of consumers' watching of online video ads. Fourth, because this study focused on expected outcomes, only behavioral beliefs were decomposed; normative beliefs and control beliefs were not. To better investigate the specific impact of each belief construct on each determinant of intention, Lim and Dubinsky (2005) suggested decomposition of normative beliefs according to referents groups, and Taylor and Todd (1995) proposed decomposition of control beliefs with self-efficacy and facilitating conditions. Decomposing other belief structures would provide a

wider range of application of the results because it would allow advertisers to consider more factors.

Fifth, the main purpose of this study was to examine cause-effect relationships between variables. Because of this, path analysis was determined as the most appropriate method of analysis. However, testing the observed variables directly using the Structural Equation Modeling is recommended for further study (Byrne 2001). This will increase the explanatory strength of statistical analysis. Finally, although college students were suitable participants in this study, they do not provide an accurate representation of the population as a whole. Thus, cross-sectional replications of this study will contribute to generalization of the result.

Conclusion

By applying the decomposed model of the TPB, the current study examined various factors that affect intention and actual behavior. The model developed in this study offers both researchers and advertisers a more complete picture of consumers' watching of online video advertising that includes beliefs, perceptions, attitudes, intentions, and actual use of online video ads. Because more consumers watch online video ads, it is advantageous not only for academic researchers in advertising but for the advertising industry in general to discover the critical relationship between factors that provoke that intention and actual watching behavior.

APPENDIX

Questionnaire

Definition of Online Video Advertising

Thank you for participating in a research study on **online video advertising**. Please read the following questions carefully and answer as best as you can. Before you start answering the questions, please take a minute to read the following definitions.

Definition of online video advertising:

- **An online video advertisement is an advertisement created by advertisers (instead of ordinary consumers) which is displayed as a streaming video clip which enables you to play, stop, and drag forward and backward at any time.**

- **Online video advertisements are available on video sharing sites (e.g., YouTube), social network sites (e.g., Facebook), brands' sites (e.g., dove.com), or portal/news sites (e.g. Yahoo.com).**

***** Please note that we are only interested in your opinions about online video ads that 1) are created by advertisers and that 2) you can play, stop, forward, or rewind. e.g.)**

Pepsi Stuff Super Bowl Ad featuring Justin Timberlake

Click NEXT to participate in the survey.

NEXT

Study of Online Video Advertising

Please read each question carefully and answer it to the best of your ability. There are no correct or incorrect responses; we are merely interested in your personal point of view.

Please answer each of the following questions by clicking the number that best describes your opinion. Some of the questions may appear to be similar, but they do address somewhat different issues.

1. For me to watch online video ads to learn about useful things is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

2. For me to watch online video ads for a pleasant rest is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

3. For me to watch online video ads to be amused is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

4. For me to watch online video ads to get away from what I'm doing is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

5. For me to watch specific online video ads that my friends send me links to is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

6. For me to watch online video ads to learn about unknown things is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

7. For me to watch online video ads to relax is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

8. For me to watch online video ads to find unique ads is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

9. For me to watch online video ads to forget about school, work or other things is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

10. For me to watch online video ads to talk to my friends about them is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

11. For me to watch online video ads to learn about things happening in the world is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

12. For me to watch online video ads to be pepped up is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

13. For me to watch online video ads that are enjoyable is

extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

14. For me to watch online video ads to occupy my time is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

15. My being able to watch the online video ads that my friends tell me about is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

16. For me to watch online video ads to get information for free is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

17. For me to watch online video ads to be thrilled is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

18. For me to watch online video ads to be entertained is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

19. For me to watch online video ads when I have nothing better to do is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

20. My being able to talk with others about online video ads that I find is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

21. For me to watch online video ads to obtain information easily is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

22. My being able to watch the online video ads that created buzz around is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

23. For me to watch online video ads to unwind is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

24. For me to watch online video ads to pass the time away, particularly when I am bored is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

25. For me to watch online video ads to tell people about the online video ads I like is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

26. For me to watch online video ads is
extremely difficult :___1_:__2__:__3__:___4__:___5__:___6__:___7__: extremely easy

27. Whether or not I watch online video ads is completely up to me.
strongly disagree :__1__:__2__:___3__:___4__:___5__:___6__:___7__: strongly agree

28. For me to watch online video ads is
impossible :___1__:___2__:___3__:___4__:___5__:___6__:___7__: possible

29. How much control do you believe you have over watching online video ads?
no control :___1__:___2__:___3__:___4__:___5__:___6__:___7__: complete control

30. Most people who are important to me think that I should watch online video ads.
definitely false:___1__:___2__:___3__:___4__:___5__:___6__:___7__: definitely true

31. Most of my close friends think that I should watch online video ads.
definitely false:___1__:___2__:___3__:___4__:___5__:___6__:___7__: definitely true

32. Most of the students in my class with whom I am acquainted watch online video ads.
definitely false:___1__:___2__:___3__:___4__:___5__:___6__:___7__: definitely true

33. It is expected of me that I watch online video ads.
definitely false:___1__:___2__:___3__:___4__:___5__:___6__:___7__: definitely true

34. Most people whose opinions I value would approve of my watching online video ads.
strongly disagree :__1__:__2__:___3__:___4__:___5__:___6__:___7__: strongly agree

35. For me to watch online video ads is
extremely bad :___1__:___2__:___3__:___4__:___5__:___6__:___7__: extremely good

36. For me to watch online video ads is
extremely worthless:__1__:__2__:__3__:__4__:__5__:__6__:__7_: extremely valuable

37. For me to watch online video ads is
extremely unpleasant:__1__:__2__:__3__:__4__:__5__:__6_:__7_: extremely pleasant

38. For me to watch online video ads is
boring:___1__:___2__:___3__:___4__:___5__:___6__:___7__: interesting

39. I plan to watch online video ads.
extremely unlikely:__1__:__2__:__3__:__4__:___5__:___6__:___7__: extremely likely

40. I am confident that if I wanted to I could watch online video ads.
definitely false:___1__:___2__:___3__:__4__:___5__:___6__:___7__: definitely true

41. I will make an effort to watch online video ads.
I definitely will not:__1__:__2__:___3__:__4__:___5__:___6__:___7__: I definitely will

42. I intend to watch online video ads.
strongly disagree:__1__:__2__:___3__:___4__:___5__:___6__:___7__: strongly agree

43. Generally speaking, how much do you care what others who are important to you think you should watch online video ads?
not at all :___1__:___2__:___3__:___4__:___5__:___6__:___7__: very much

44. Generally speaking, how much do you care what your close friends think you should watch online video ads?
not at all :___1__:___2__:___3__:___4__:___5__:___6__:___7__: very much

45. Generally speaking, how much do you care what your classmates think you should watch online video ads?
not at all :___1__:___2__:___3__:___4__:___5__:___6__:___7__: very much

46. Generally speaking, how much do you care what people whose opinions you value think you should watch online video ads?
not at all :___1__:___2__:___3__:___4__:___5__:___6__:___7__: very much

47. Watching online video ads will help me to learn about useful things.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

48. Watching online video ads will help me to have a pleasant rest.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

49. Watching online video ads will help me to be amused.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

50. Watching online video ads will help me to get away from what I'm doing.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

51. Watching online video ads will help me to watch specific ads that my friends send me links to.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

52. Watching online video ads will help me to learn about unknown things.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

53. Watching online video ads will help me to relax.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

54. Watching online video ads will help me to find unique ads.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

55. Watching online video ads will help me to forget about school, work or other things.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

56. Watching online video ads will help me to talk to my friends about online video ads.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

57. Watching online video ads will help me to learn about things happening in the world.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

58. Watching online video ads will help pep me up.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

59. Watching online video ads will help me to enjoy.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

60. Watching online video ads will give me something to occupy my time.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

61. Watching online video ads will give me an opportunity to watch the online video ads that my friends tell me about.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

62. Watching online video ads will help me to get information for free.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

63. Watching online video ads will help me to be thrilled.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

64. Watching online video ads will help me to be entertained.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

65. Watching online video ads will give me an opportunity to do something when I have nothing better to do.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

66. Watching online video ads will help me to talk with others about the online video ads I find
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

67. Watching online video ads will help me to obtain information easily.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

68. Watching online video ads will help me to watch ads that created buzz around.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

69. Watching online video ads will help me to unwind.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

70. Watching online video ads will help me to pass the time away, particularly when I am bored.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

71. Watching online video ads will help me to tell people about the online video ads I like.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

72. If I wanted to, I could easily operate online video ads on my own.

unlikely :___1__:___2__:___3__:___4__:___5__:___6__:___7__: likely

73. I know enough to watch online video ads on my own.
unlikely :___1__:___2__:___3__:___4__:___5__:___6__:___7__: likely

74. I would feel comfortable watching online video ads on my own.
unlikely :___1__:___2__:___3__:___4__:___5__:___6__:___7__: likely

75. I would be able to watch online video ads even if there is no one around to tell me how to watch it.
unlikely :___1__:___2__:___3__:___4__:___5__:___6__:___7__: likely

76. Being able to operate online video ads on my own is
unimportant :___1__:___2__:___3__:___4__:___5__:___6__:___7__: important

77. Knowing enough to watch online video ads on my own is
unimportant :___1__:___2__:___3__:___4__:___5__:___6__:___7__: important

78. Being comfortable watching online video ads on my own is
unimportant :___1__:___2__:___3__:___4__:___5__:___6__:___7__: important

79. Being able to watch online video ads even if no one is around to tell me how to watch it is
unimportant :___1__:___2__:___3__:___4__:___5__:___6__:___7__: important

80. I have access to the Internet whenever I want to watch online video ads.
unlikely :___1__:___2__:___3__:___4__:___5__:___6__:___7__: likely

81. I have a computer whenever I want to watch online video ads.
unlikely :___1__:___2__:___3__:___4__:___5__:___6__:___7__: likely

82. I have the time needed to watch online video ads.
unlikely :___1__:___2__:___3__:___4__:___5__:___6__:___7__: likely

83. Having access to the Internet whenever I want to watch online video ads is
unimportant :___1__:___2__:___3__:___4__:___5__:___6__:___7__: important

84. Having a computer whenever I want to watch online video ads is
unimportant :___1__:___2__:___3__:___4__:___5__:___6__:___7__: important

85. Having the time needed to watch online video ads is
unimportant :___1__:___2__:___3__:___4__:___5__:___6__:___7__: important

86. People who are important to me think that I should watch online video ads.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

87. My close friends think that I should watch online video ads.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

88. My classmates think that I should watch online video ads.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

89. People whose opinions I value think that I should watch online video ads.
extremely unlikely :__1__:__2__:__3__:___4__:___5__:___6__:__7__: extremely likely

90. On an average **month**, how many hours do you usually spend watching online video ads?

None.....1
1 minute to less than 1/2 hour per month 2
1/2 hour to less than 1 hour per month.....3
1 hour to less than 1 1/2 hours per month 4
1 1/2 hours to less than 2 hours per month 5
More than 2 hours per month 6

91. How often do you usually watch online video advertisements at following web sites?

	Never						Always
(1) Video sharing Web sites (e.g., YouTube)	1	2	3	4	5	6	7
(2) Social networking Web sites (e.g., Facebook)	1	2	3	4	5	6	7
(3) Brand Web sites (e.g., Dove.com)	1	2	3	4	5	6	7
(4) Portal/News Web sites (e.g., Yahoo.com)	1	2	3	4	5	6	7
(5)Others: (write it in the "Additional comments)	1	2	3	4	5	6	7

92. On an average **month**, how many times do you usually watch online video ads?

None.....1
1-2 times per month.....2
3-4 times per month.....3
5-6 times per month.....4
Every day.....5
More than once a day.....6

93. How do you usually access online video ads?

	Never						Always
(1) By actively searching for specific ads on the Internet	1	2	3	4	5	6	7
(2) By clicking links in emails my friends sent to me	1	2	3	4	5	6	7
(3) By clicking ads posted on friends' social network websites	1	2	3	4	5	6	7
(4) By browsing Web sites accidentally	1	2	3	4	5	6	7

94. The following items assess your **attitude toward online video advertising in general.** Please circle the number that best describes your opinion for each item. Many items might seem similar; however no two items are exactly alike so be sure to circle one number for each statement.

My attitude toward online video advertising in general is...

Bad	1 - - 2 - - 3- - - 4 - - 5- - - 6 - - 7	Good
Negative	1 - - 2 - - 3- - - 4 - - 5- - - 6 - - 7	Positive
Unfavorable	1 - - 2 - - 3- - - 4 - - 5- - - 6 - - 7	Favorable

95. On an average **month**, how many times do you usually pass along online video ads (via emails) to your friends or family?

None.....1
1-2 times per month.....2
3-4 times per month.....3
5-6 times per month.....4
Every day.....5
More than once a day.....6

96. How many hours do you usually spend **using the Internet** on an average **week**?

Less than 7 hours.....1
7 hours to less than 21 hours.....2
21 hours to less than 42 hours.....3
42 hours to less than 63 hours.....4
More than 63 hours.....5

97. The following items assess your **beliefs toward advertising in general**. Please circle the number that best describes your opinion for each item. Many items might seem similar; however no two items are exactly alike so be sure to circle one number for each statement.

Bad	1 - - 2 - - 3- - - 4 - - 5- - - 6 - - 7	Good
Weak	1 - - 2 - - 3- - - 4 - - 5- - - 6 - - 7	Strong
Worthless	1 - - 2 - - 3- - - 4 - - 5- - - 6 - - 7	Valuable
Unnecessary	1 - - 2 - - 3- - - 4 - - 5- - - 6 - - 7	Necessary
Unimportant	1 - - 2 - - 3- - - 4 - - 5- - - 6 - - 7	Important

98. The following items assess your **feelings toward advertising in general**. Please circle the number that best describes your opinion for each item. Many items might seem similar; however no two items are exactly alike so be sure to circle one number for each statement.

1) Advertising is essential.
strongly disagree :__1__:__2__:__3__:___4__:___5__:___6__:___7__: strongly agree

2) Most advertising insults the intelligence of the average consumer.
strongly disagree :__1__:__2__:__3__:___4__:___5__:___6__:___7__: strongly agree

3) In general, advertising results in lower prices.
strongly disagree :__1__:__2__:__3__:___4__:___5__:___6__:___7__: strongly agree

4) Advertising often persuades people to buy things they shouldn't buy.
strongly disagree :__1__:__2__:__3__:___4__:___5__:___6__:___7__: strongly agree

5) In general, advertisements present a true picture of the product being advertised.
strongly disagree :__1__:__2__:__3__:___4__:___5__:___6__:___7__: strongly agree

6) Advertising helps raise our standard of living.
strongly disagree :__1__:__2__:__3__:___4__:___5__:___6__:___7__: strongly agree

7) Advertising results in better products for the public.
strongly disagree :__1__:__2__:__3__:___4__:___5__:___6__:___7__: strongly agree

99.Please indicate your gender. (female/ male)

100. How old are you? _____ years old

101. What is your major? _____

The following information will be used for the extra credit purpose only.

102. Please type eight digit numbers of your PID. A _____

103. Please type your full name. _____

104. Please type the course number that you're receiving an extra credit for.
_____

Thank you for your participation!

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