The role of animated images

in the website evaluation and online purchase process

Mi Zhou

A Thesis

in

The Department

of

Marketing

Presented in Partial Fulfillment of the Requirements

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

Concordia University

Montreal, Quebec, Canada

December 2019

CONCORDIA UNIVERSITY

School of Graduate Studies This is to certify that the thesis prepared

This is to certify that the thesis prepared

By: Mi Zhou

Entitled: The role of animated images in the website evaluation and online

                  purchase process

and submitted in partial fulfillment of the requirements for the degree of

Master of Science in Administration (Marketing)

complies with the regulations of the University and meets the accepted standards with

respect to originality and quality.

Signed by the final examining committee:

               Dr. Michéle Paulin   Chair

               Dr. Michéle Paulin   Examiner

               Dr. Kamila Sobol   Examiner

               Dr. Michel Laroche   Supervisor

Approved by   Dr. Zeynep Arsel

               Chair of Department

Dec13th 2019   Dr. Kathleen Boies

               Dean of Faculty

Abstract

The role of animated images

in the website evaluation and online purchase process

Mi Zhou

More companies, especially the electronic companies, have started to use animated images on their websites to strength the first impression of their products and services. The first objective of this study was to aim at understanding the following gap: understanding the relationship between the animated images and the purchase intention. This will be done considering two mediators: visceral emotion, website credibility. No research focuses on the impact of websites animated images considering serial mediators. The second objective was to investigate the moderating effect of the culture value on the impact of the animated images on Visceral emotion (Pleasure, arousal, dominance). The results indicate that animated images will elicit greater emotional pleasure (arousal) which will induce higher perceived website credibility, thus leading to higher purchase intention than static images on the electronic's product pages. Emotional dominance does not seem to change when customers see animated images. In fact, people from different countries have similar emotional flow towards animated images on the electronic's product pages and similar ones following perceived site credibility and purchase intention. The managerial implications of this study suggest for electronic companies to use more animated images on their product pages. Website builder could focus their effort on creating animated product images instead of making two versions of images to adjust the tastes of different cultures. In both cases, electronic companies and web builders should be careful in their ethical approach to ensure they do respect individuals' rights and maintain an ethical mindset in their whole vision of their marketing strategy and application.

Keywords: animated images; visceral emotion; website credibility; purchase intention; cultural value.

Acknowledgments

First of all, I would like to thank my supervisor, Dr. Michel Laroche. He helped me a lot to define the research topic, to construct my research model and guide me on building my thesis framework. Without his great help, I was unable to complete the thesis as expected.

Secondly, I am very grateful to Rong Li that gave me a lot of suggestions during the process of designing the experience and analyzing data. With her selfless assistance, I can complete the paper as planned.

Thirdly, I want to say thank you to Dr. Michèle Paulin for helping me to edit y research proposal and giving me valuable advice about my thesis model and writing. I appreciated that.

Also, I want to thank my family members and my boyfriend Zeyu Zhang for supporting me and standing beside me unconditionally. When I was lost, they always smiled and told me I could.

Lastly, I would like to say thank you to the John Molson School of Business (JMSB). I had a very happy time to study in Concordia where I learned much useful knowledge. Professors and students there are brilliant and have full of passions, which engaged me a lot. I would never forget this wonderful experience.

Table of Contents

List of Tables

List of Figures

1. Introduction

Companies build websites to provide first impression of an organization and their services. After a person opens a website, his/her first impression is made in less than 50 milliseconds (Gitte Lindgaard et al. 2006). This first impression leads to stay or leave the website. Based on this new behavior, some companies start to use videos on their product pages to attract customers' attention. Videos have large volume slowing down the speed of the page appearance leading to low SEO (search engine optimization). Although this may appear to be problematic, some companies use product images on their websites to draw customers' attention. These products' images take less space (volume) but they are not as stimulating for the audience who peaks on the website.

In research, animated images have different physiological stimuli than still images (Lang, Dhillon, and Dong, 1995; Reeves and Nass 1996). In fact, some research document the effect of animated image in Web ads (Lang et al. 2002; Heo and Sundar 2000). However, less attention has been devoted to the following change of emotions, the judgment process of website's credibility and the role played on the customers' online purchase process.

In practice, Huawei and Apple use animated images on their product pages to make their products look cool. However, this action maybe has different impacts to people from various cultures and thus their purchasing decision making (Tsikriktsis, 2002). The network is essentially a global medium. Therefore, deciding how a website expresses potential culturally specific content to global visitors is an important consideration in website design.

This study will focus on the impact of animated images on electronics' product pages, comparing viewer's purchase intentions based on: a) their experience with viewing moving and static product images on the website analyzing their initial emotions, b) their perception with regards to the website credibility and purchase intention and c) comparing respondents' similarities and differences based on their cultural background.

The purposes of the study will be to: a) understand the relationship between the animated images and the purchase intention taking into consideration two mediators: Visceral emotion, website credibility; b) the moderating effect of the culture value to the impact of the animated images on Visceral emotion effect.

The intended findings will provide both: a) a clearer perspective from a theoretical point of view on online consumer behavior intentions in relation to new technology developments and changing behaviors from participants, and b) provide insightful perspectives to business decision makers in terms of website designs and operational speed to maximize interactivity between the service provider and the customer, in this case, companies who use e-retailing to sell their online product. The following section provides a detailed review of the literature supporting the development of the study hypotheses.

2. Theoretical framework and Hypothesis

2.1. Theoretical framework and conceptual model

In this research, animated image is the independent variable whereas the purchase intention is the dependent variable. We will test the direct effect of animated image on the purchase intention. In addition, two mediators are considered in this research: visceral emotion, website credibility. In particular, we will focus on the impact of websites animated images considering key mediator: the culture value on the impact of the animated images on Visceral emotion (Pleasure, arousal, dominance).

Credibility and Purchase intention and culture values

Visual design is very important for any electronic website to attracts customers. It is defined as the balance, emotional attraction, or aesthetics of a website (Garrett, 2010). Besides, it is presented through colors, shapes, type of words or images, music or animation(Cyr, Head, & Ivanov, 2006). The visual design could also bring the 'halo effect' to the website, which is the first impressions created by the visual appeal of websites. Psychology researchers generally approved the long-term effect of these first impressions based on that people often make their judgment (Lindgaard et al., 2006), and perceived website credibility is one of the judgments (Skadberg & Kimmel, 2003).

Former research has shown that visual images as an important part of visual design, could help a retailer to create not only a positive impression, but also good emotional experiences (Park, Choi, & Kim, 2005; Tractinsky & Lowengart, 2007). Lastly, it could affect consumers' decision-making processes (Janiszewski, 1993; Kim & Moon, 1998).

This process could be explained by the Hierarchy of Effects (HOE) model. According to the HOE, three steps are taken by customers to respond to advertisement: cognition – affect – conation (Lavidge & Steiner, 1961). Cognition refers to ''a system of beliefs structured into some kind of semantic network'' (Holbrook & Batra, 1987), whereas affect is the statement of customers' emotion or feelings (Lavidge & Steiner, 1961) and conation is defined as behavioral intentions (Barry & Howard, 1990). However, Zajonc and Markus (1982) mentioned the change of the sequence to affect- cognition - conation based on their views of affect primacy.

Applying the new HOE model from Zajonc and Markus (1982) on using animate images, the current study posited that the visual design of electronics' product page influences consumers' emotion (affect), which then has an impact on their credibility judgment (cognition) and, ultimately, on their purchase intentions (conation). The conceptual model provides an overview of the intended study (Figure 2.1). The rationale for the model will be further explained by detailing the following key concepts and pertinent hypothesis for: animated image, visceral emotions, website credibility and culture value.
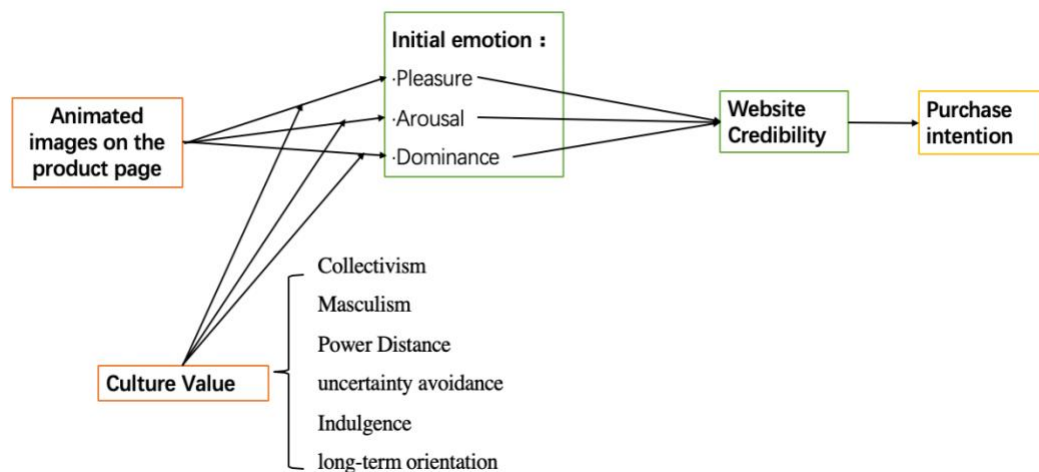
Figure 2.1: Proposed conceptual research model: enhance product page visual design

2.2. Animated image

In the Web environment, technicians achieve animated images by using a series of static images abutting one another to create an illusion of motion (Sundar & Kalyanaraman, 2004). Numerous researchers believe that animated images which could be called moving images, have higher physiological stimulate than the static ones (e.g., Detenber and Reeves 1996; Lang, Dhillon, and Dong 1995). Detenber, Simons, and Bennett confirm it by showing that that movement in pictures had a positive relationship with physiological arousal (1998).

These days, a growing number of Web ads have started to use animated rather than static. Moreover, researchers have noticed the psychological superiority of animated Web ads over static ones. Furthermore, animated ads have been approved to have stronger directed reaction (Lang et al. 2002), higher awakening (Heo and Sundar 2000a), faster click-throughs (Li and Bukovac 1999), more content memory(Heo and Sundar 2000b; Lang et al. 2002; Li and Bukovac 1999), and more

positive attitudes toward both the ads (Kalyanaraman and Oliver 2001) and the Web site (Sundar et al. 1997). These findings are consistent with the Motion Effect Theories.

Motion effect theories assume that humans have an inherent preference for moving objects. More specifically, when a moving thing appears, people will focus their attention on this source of movement and process relevant information (Sundar & Kalyanaraman, 2004). Furthermore, this stimulus will strength the affective reaction to the second stimulus (Zillmann 1971, 1983), and thus, cause the psychological effect, such as visceral emotion, and following behavior intention.

2.3. Visceral emotion

Visceral emotion has been defined as the immediate powerful emotional reaction triggered by a design (Norman, 2004).

Norman (2004) explained it by using the bottled water bottle designs case, he asked,

"How does one brand of water distinguish itself from another? Packaging is one answer, distinctive packaging that, in the case of water, means bottle design. Glass, plastic, whatever the material, the design becomes the product. This is bottling that appeals to the powerful visceral level of emotion, that causes an immediate visceral reaction: 'Wow, yes, I like it, I want it.' It is, as one design explained to me, the 'wow' factor (pp. 64–65)."

While many of methods have been validated and accepted to use to describe emotions, a three-dimensional approach which is called PAD emotion model has been used frequently. Mehrabian and Russell (1974) suggested that the dimension of pleasure-displeasure (the emotional assessment

object), arousal-nonarousal (the stimulating emotional correlation), and dominance-submissiveness (the conversion stimulus) could describe emotions generally. This model has been approved by Shaver, Schwartz, Kirson and O'connor (1987), who used multidimensional analysis to study 135 emotion terms and came up with the same results by using PAD emotion model.

In most of studies, researchers suggest using two basic emotional dimensions: pleasure and arousal as the "core effect" (Russell, 2003) to test the affective quality of an object (e.g., a website). Research confirms the polarity and independence of these dimensions (e.g., Feldman-Barrett & Russell, 1998; Green, Goldman, & Salo, 1993; Mehrabian, 1995; Reisenzein, 1994; Yik, Russell, & Barrett, 1999). Besides, they have started to lose the interest to the third emotion dimension: dominance (or the perceived control). The reason for losing interest is that it represents a more cognitive response than an emotional state (Feldman Barrett & Russell, 1999) and it is hard to establish its independence from the other two dimensions in the empirical research (Brengman & Geuens, 2004). Former study even approved that consumer behavior could not, or little be impacted by dominance (Donovan et al., 1994). However, Mehrabian, Wihardja, and Ljunggren (1997) approved it by showing that people like situations that trigger positive pleasure and dominance emotions.

Thus, dominance is included in this research for two reasons. First, the lack of dominance dimension may cause the limited stimulus (Brengman & Geuens, 2004). Thus, the addition of dominance can constitute an entire stimulus set and make the study become more representative and comprehensive. Second, Dominance is particularly relevant to human-computer interaction,

especially in e-retail environment, where consumers interact with the computerized system. In such environment, the perceived control emotion is every important. perceptions of control (or lack thereof) are very important (Brown, 1986; Huang, 2003; Sautter, Hyman, & Lukosius, 2004; Shneiderman, 1998). Visceral emotions should be looked at considering the animated image and the emotional pleasure, arousal and dominance aroused by the customer.

2.3.1. Animated images and pleasure

The pleasure dimension of emotion is defined to present the hedonic quality or enjoyment of the affective experience and it ranges from unpleasant to pleasant.

In recent years, websites' visual design features on their users' emotions, such as liking, enjoyment (Éthier et al., 2006; Éthier, Hadaya, Talbot, & Cadieux, 2008) have been identified by the former researches. Rowley found in his research (2002) that both static images and kinetic graphics can make a Web site page look more interesting.

According to the former researches, the key component of animation is motion (Rieber 1991) which inherently attracts attention in the visual field (Lang et al. 2002; Reeves and Nass 1996). Moreover, animated images have been approved to have a stronger psychological effect than static images (Sundar & Kalyanaraman, 2004). Niklas Ravaja (2004) examined the influence of a moving and static facial image on emotion and attention responses and found that a moving face image triggered higher self-reported pleasure and arousal than the static ones.

This study, therefore, expects to see users will have greater pleasure when they are exposed to a product page containing animated images compared with, they exposed to a product page with static images.

2.3.2. Animated images and arousal

The arousal dimension of emotion refers to the degree of activation of the emotional response and ranges from sleepy to wide-awake (Ravaja, 2004). Besides, in the context of psychology, arousal is the state of physiological alertness, awaking, and concentration.

According to the finding of theorists, a motion has high expressiveness and can arouse strong emotional responses (Arnheim, 1958/1983; Giannetti, 1976). Through the alpha frequency measurement of the electronic EEG, the motion has a positive relationship with cortical arousal in viewers (EEG; Reeves, Thorson, Rothschild, McDonald, Hirsch, & Goldstein, 1985). Reeves and others (1985) propose that people have an automatic response, such as cortical arousal, or increased attention to certain types of motion in general. Furthermore, Detenber and Reeves (1996) suggested that animated images have a positive relationship with self-reports of emotional arousal. Thus, this research proposes that animated images will elicit greater emotional arousal than static images on the electronics' product pages.

2.3.3. Animated images and dominance

Dominance has been used to describe the feeling of controlling, influential, or dominant (Coan & Allen, 2007). According to the research of Porat and Tractinsky (2012), the web store's usability

has a positive effect on the feeling of dominance. The importance of allowing users to control the technological environment has been mentioned by the IT researchers for long time (Brown, 1986; Compeau & Higgins, 1995; Shneiderman, 1998) and the increase of usability is a way to achieve such control (Porat & Tractinsky, 2012).

Lavie and Tractinsky (2004) have done a series of survey-based studies to developing aesthetic measurement tools for perceived web pages and found that found that the user's aesthetic concept contains two dimensions: "classical aesthetics" (visual clarity) and "expressive aesthetics"(visual richness). In addition, they found that the aesthetic perception has a positive relationship with usability, which has been confirmed by similar early findings (Kurosu and Kashimura 1995, Tractinsky 1997). Since the animated images could bring more perception of visual richness (Dao lin & Si da, 2016), these images may increase higher aesthetic perception, perception of web usability (Lavie & Tractinsky, 2004) and then cause better emotional dominance reactions in view of the website credibility.

2.4. Emotion and Website credibility

Whitehead (1968) presented in his research that factors corresponded to expertise, trustworthiness corresponded to website credibility. Trustworthiness is presented as well-intentioned, truthful, unbiased. Whereas, expertise is defined as knowledgeable, experienced, competent and accurate. Similarly, source credibility was defined as ''safety'' ''qualification'' ''dynamism'' and ''sociability'' by Berlo, Lemert, and Mertz (1969). In their research, it is notable

that sociability was not as strong as the other three, whereas Safety and vitality seem to be more visceral reactions.

The dynamism which closest links with web design mattered a lot when the web users made their judgment for the web credibility (Fogg et al., 2001) with 46.1% of respondents for "'design and look,'' and 28.5% for "information design". Thus, 75% of web users reported making credibility judgments based on the content presentation instead of the evaluation of the creator's authority. So far it has been shown that even the credibility judgments can result from different processes, dynamic or visual elements can influence judgments. As credibility is perceived quality, it does not exist in an object, a person or a message (Frogg et al, 1999). Therefore, when researchers discuss the credibility in a computer context, they always talk about the perception of credibility (Petty & Cacioppo, 1981; Self, 1996).

Animation (Moving images) as a visual element(Cyr et al., 2006) could induce higher arousal, both self-reported and physiological than a still image(e.g., Detenber and Reeves 1996; Lang, Dhillon, and Dong 1995). Moreover, animated graphics have greater audiovisual stimuli than still graphics to the website user (Detenber and Reeves 1996; Lang, Dhillon, and Dong 1995).

According to the results of previous studies, emotional states such as pleasant or unpleasant may affect the individual's judgment in the direction of emotional (Forgas, 1995; Isen, Shalker, Clark, & Karp, 1978; Laird, Wagener, Halal, & Szegda, 1982). In addition, Richard (2005) support it by mentioning that the characteristics of products and sites could impact the visitors' arousal and pleasure reaction, and thus influence their following responses.

Besides, emotions with the same valence but different dominance evaluations have been found to have different effects on following judgment (Bodenhausen, Sheppard, & Kramer, 1994; DeSteno et al., 2000; Keltner, Ellsworth & Edwards, 1993; Lerner & Keltner, 2000, 2001). For example, fear and anger, these two emotions have negative valence but have significantly different influences on risk assessment (Lerner & Keltner, 2001). They found that angry people had a more optimistic risk assessment than those who are afraid. This finding approved that different dominance levels can adjust this relationship. Dunn and Schweitzer (2005) have also found in their research that Participants who were in the angry condition (high dominance level) were significantly less trusting than were participants in the sad condition (Low dominance level). This result shows that higher dominance level emotion could predict a higher level of the judgment of trust. Thus, this research believes that emotions have a positive relationship with the perception of web credibility.

Skadberg and Kimmel (2003) indicate that attractiveness is important to lead the viewer to scrutinize further the webpage, perceive richness and quality in the images, engage in more interactivity, and evaluate the website as credible. Since animated images could attract more attention than still images (Sundar & Kalyanaraman, 2004), this study then proposes that moving images could cause more positive emotion and could predict the higher perception of web credibility and purchase intention.

2.5. Credibility and Purchase intention

Purchase Intention has been defined as the predisposition to buy a product (Belch et al., 2004). More specifically, it could also indicate the possibility of an individual purchasing a product or a brand (Phelps & Hoy, 1996), which is the signal of the last consequence for numerous e-commerce customers (Ganguly et al, 2010). For this reason, former researchers like to use purchase Intention as a dependent variable (Goldsmith et al., 2000; Yi, 1990; Cox & Locander, 1987; Sallam, 2011).

Furthermore, website credibility is one of the most important factors that influence customer's behavior and intention to purchase online. (George et al., 2016; Toufaily et al., 2013). Jarvenpaa and Tractinsky (1999) found from their research that customer's trust could positively predict the willingness of customers to purchase from online stores. Several studies approved this result by showing that increasing customer trust in online sources leads to an increase purchase intention (Gefen et al., 2003; Kim and Kim, 2005; Salam et al., 2005; Suh and Hun, 2003; Sultan et al, 2005). Following this rationale and the objectives of this study, here are the formulated hypothesis for the website credibility:

H1: Pleasure and perceived website credibility will serially mediate the relationship between the animated images and the purchase intention, such that animated images will elicit greater emotional pleasure which will induce higher perceived website credibility, thus leading to higher purchase intention than static images on the electronics' product pages.

H2: Arousal and perceived website credibility will serially mediate the relationship between the animated images and the purchase intention, such that animated images will elicit greater

emotional arousal which will induce higher perceived website credibility, thus leading to higher

purchase intention than static images on the electronics' product pages.

H3: Dominance and perceived website credibility will serially mediate the relationship

between the animated images and the purchase intention, such that animated images will elicit

greater emotional dominance which will induce higher perceived website credibility, thus

leading to higher purchase intention than static images on the electronics' product pages.

2.6. Culture Value

The global world web is a necessary tool for marketers. The Internet is an ideal medium to

reach beyond the domestic market to spread products/services awareness, feedback, purchases to

many different markets (Würtz, 2005). In this context, we need to look at culture values similarities

and differences across countries, regions, local areas, including individuals and culture group

identities and differences.

To begin a marketing strategy through a website/Internet campaign, the localization might be

simple way to move towards an international market (Würtz, 2005). The sites themselves are

simple, and the content of the site is text-based, requiring only cross-cultural translation (Würtz,

2005). However, with the development and implementation of flash and various animation videos,

new standards have been set for the localization strategy of corporate websites (Würtz, 2005).

Nation-states have been used as a categorization for culture by various researchers loose

(Doney et al. 1998). Hofstede defined culture as ''the collective programming of the mind which

distinguishes the members of one group from another'' (Hofstede, 1980). In fact, people from a given culture would more likely to have same shared values, attributes, beliefs and behaviors (Erumban and de Jong 2006).

In the early stages of the Internet Marketing, Evers and Day (1997) demonstrated that people from different cultures have differences with Web interface acceptance and preferences for design features. Del Galdo and Neilson (1996) found that psychological and social reactions vary between different cultures for the visual design elements, for example, color or screen images design. This means that culture value might influence the impact of the different formats of the image on customers' emotions.

Some recent empirical studies have looked at how culture affects web trust, credibility and web design (Cyr, 2008; Tsikriktsis, 2002; Cyr, 2013; Cyr, Head, & Larios, 2010). Cyr and Trevor-Smith (2004) tested eight elements of website design for different websites in the USA, Germany, and Japan and found that there was a significant difference between different countries. According to Cyr (2008; 2013) and Cyr et al. (2010), website characteristics such as information design, visual design, and navigation design are different in preferences in different countries.

Thus, this study will consider all these points while adopting the Hofstede's six dimensions of national cultures. The dimensions have been widely used by scholars (Steenkamp, 2011) and were included in this study to test the moderator effect. This study assumes that Power Distance, collectivism, masculinity, uncertainty avoidance, long-term orientation, and indulgence could moderate the effect of the animated image on the pleasure, arousal and entertainment separately.

This study proposes to make each cultural dimension primarily related to the three dimensions of emotions. The rationale is further detailed integrating the relevant hypothesis to that effect.

2.6.1. Collectivism

Collectivist culture prioritizes group welfare rather than individual goals (Hofstede,1980). Mooji and Hofstede (2011) found that in collectivist societies, people tend to associate self-esteem with others and prefer to be treated as an interdependent entity, while personal achievement plays a secondary role. In addition, individuals in collective culture tend to be interdependent with others and often establish a deep-rooted network of relationships and personal loyalty (Hui, 1984). Values in collectivist culture include training, physical condition and use of skills (Hofstede,1980).

On the contrary, Individualism refers to the tendency to consider oneself rather than the other members of society (Hofstede, 1980). More specifically, individuals are given the expectation to be independent of others and take care of themselves (Würtz, 2005). Moreover, in the social sphere, individualists are more concerned with themselves and their personal goals (Hofstede, 1980). Personal values include personal time, freedom, and challenge (Hofstede, 1980).

In the website consent, Kang and Corbitt (2002) tested the characteristics of graphics in Singapore (collectivism) and Australia (individualism) and found in their research that web designers from Singapore (collectivism) relied more on display colors, company logos, animations, and pictures, to meet users' requirements. In contrast, web designers from Australia (individualism) focused more on customer reactions and text (Kang & Corbitt, 2002), because 81 percent of

Australians preferred text-based interfaces than image-based ones (Lim and Turks, 1999). Since the animated image is a series of static images, this research then believes that people from collectivist cultures are more likely to passively stimulate emotions by animated images than those from individualistic cultures.

Besides, Del Galdo and Nielson (1996) have studied the impact of collectivism and individualism on Web design, comparing Japan (collectivism) and the United States (individualism). They found that people from collectivist culture would like to have a common behavior as a group, on the contrary, people from individualist cultures want control of their environment. Since animated images stimulate higher perception of website aesthetic (Dao lin & Si Da, 2016), perceived usability and thus increase the emotional dominance: people with the higher collectivism scores may have lower emotional dominance then people with high individualism scores. This leads to the following hypotheses:

H4a$_1$ People with high collectivism scores are more likely to passively stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high individualism scores.

H4a$_2$ People with high collectivism scores are more likely to passively stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high individualism scores.

$H4a_3$ People with high collectivism scores are less likely to passively stimulate emotional dominance by animated images on the electronics' product page, as well as their following perceived website credibility and purchase intention than those with high individualism scores.

2.6.2. Masculine

Masculinity is defined as the desire to succeed and the ambition to achieve goals. Hofstede (1980) approved in his research that countries with high male scores are often more ambitious and aware of competition. Masculine society places values on challenge, advancement, social recognition, and acquisition of wealth (Hofstede, 1980).

On contrast, femininity is a tendency to caring for other social members and seeking cooperation rather than fierce competition (Hofstede, 1980). People from feminine society refer to place value on quality of life, security, taking care of others, and the environment (Hofstede, 1980).

When it comes to the relationship between masculinity and graphics, Marcus and Gould (2000) found examples of websites that showed that web designers who from a culture with high values of material products and more confident, are more likely to use graphics and multimedia on websites. In addition, psychological researchers believed that "aggression, ambition, argumentativeness, assertiveness, boastfulness, confidence, and determination" were attributes of dominance (Burgoon, Johnson, & Koch, 1998), which also . The preference of high assertiveness and high ambition is similar with the characteristics of Hofstede's dimension of masculinity,

elements like streaming video, sound, and animation may be preferred by people from masculine society. This assumption leads to the following hypotheses:

H4b$_1$ People with high masculine score are more likely to passively stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high feminine scores.

H4b$_2$ People with high masculine score are more likely to passively stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high feminine scores.

H4b$_3$ People with high masculine score are more likely to passively stimulate emotional dominance by animated images on the electronics' product, which induce their perceived website credibility and thus enhance their purchase intention page than those with high feminine scores.

2.6.3. Power Distance

Power Distance is defined as "the extent to which the less powerful members of in- situations and organizations within a country expect and accept that power is distributed unequally" (Hofstede, 2005, p. 46). More specifically, a high score means that the country is a hierarchical society, in which case people are more likely to accept inequality (Hofstede, 1980). Instead, people from lower powers countries are more likely to fight for the equal rights they deserve.

Chang and Chieng (2006) found in their research that people from high Power Distance society care more about the utilities of products than their own attitude. Moreover, Zhang (2010) indicated that people with high Power Distance scores have strong self-control and may limit their desires and purchase behavior (Zhang, 2010). In contrast, people with lower Power Distance score have more impulsive behavior, since they have poor self-control ability (Zhang, 2010). Thus, when people from different culture may have different reaction toward moving graphics on the products page. More specifically, people from high Power Distance society may control their emotions toward the animated images, since they care more about the practical function of the products.

In addition, former researches like to compare Power Distance dimension with collectivism/individualism dimensions. Hofstede (2005) argued that Power Distance is very closely correlated to Individualism - Collectivism. This statement has been approved by showing that most part of collectivism could be explained by high Power Distance, which negatively correlated with individualism (Schwartz 1994; Gouveia & Ros, 2000). Since people from collectivist cultures more like animations (Kang & Corbitt, 2002) and less like to control the environment (Del Galdo & Nielson, 1996), we hypothesize :

H4c_1 People have high Power Distance scores are more likely to have less stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low Power Distance scores.

$H4c_2$ People have high Power Distance scores are more likely to have less stimulate emotional Arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low Power Distance scores.

$H4c_3$ People have high Power Distance scores are less likely to passively stimulate emotional dominance by animated images on the electronics' product page, as well as their following perceived website credibility and purchase intention than those have low Power Distance scores.

2.6.4. Uncertainty Avoidance

Uncertainty avoidance is defined as the degree to which cultural members worry about future unknowns or uncertainties and dealing with indeterminacy in the future (Hofstede, 1984). More specifically, People from high uncertain avoidance countries are more likely to adopt formal rules and regulations to reduce the amount of uncertainty and are less inclined to change than those from countries with lower uncertainty avoidance scores (Hofstede, 1980, 1991, 2001, 2002).

Hofstede (2001) believes that this cultural dimension is a persistent feature of culture, affecting the choice behavior of various customers. In the context of the network, individuals who are from a low uncertainty avoidance tend to be more open to finding information and choosing new ones (Vishwanath, 2003).

The picture is a compelling device (Miniard, Bhatla, Lord, Dickson, & Unnav, 1991), which enables better message processing and better message learning by enhancing the memorability of other semantic information (Childers & Houston, 1984; Lutz & Lutz, 1977). Because images convey excellent visual information and attract a disproportionate amount of processing (Taylor & Thomson, 1982), they can influence the reduction of the feeling of uncertainty. In addition, animated images could attract more attention and transfer more information to the viewers than static images(Sundar & Kalyanaraman, 2004).

Moreover, Donthu & Yoo (1998) found from their research that people who have high-uncertain avoidance scores have higher service quality expectations than people with low uncertainty avoidance scores. Moreover, website aesthetics has been approved as one of the components of service quality (Madu & Madu, 2002). Since moving images could trigger the higher perception of website aesthetic and thus increase the perceived website usability and emotional dominance reaction (Porat & Tractinsky, 2012). This study aims to test the following hypotheses:

H4d$_1$ People have high uncertainty avoidance scores are more likely to have less stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low uncertainty avoidance scores.

H4d$_2$ People have high uncertainty avoidance scores are more likely to have less stimulate emotional arousal by animated images on the electronics' product page, which induce their

perceived website credibility and thus enhance their purchase intention than those have low

uncertainty avoidance scores.

H4d₃ *People have high uncertainty avoidance scores are more likely to passively stimulate emotional dominance by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low uncertainty avoidance scores.*

2.6.5. Indulgence

Indulgence refers to the tendency to allow people to enjoy life (Hofstede, Hofstede, & Minkov, 2010). At the opposite extreme, restraint refers to the belief that it is necessary to suppress the desire to satisfy and control social norms (Hofstede, Hofstede, & Minkov, 2010). Therefore, it is hard for people from restrained societies to understand and agree with the indulgent attitude. Moreover, People with high indulgence score will not be happy, if you give them numerous rules to obey. It does not mean that countries with high scores of indulgences do not follow the social orders; it is better to say that they care more about their freedom and be more willing to open their hearts to learn new things. For instance, people with high restrained scores tend to obey social standards in their general life, because they care about public opinion and fear to be discussed by other people. In this way, they usually shy and would rather give up the right to pursue indulgence to conform to a united standard. In contrast, people with high indulgent scores would not hide their

desire to indulgence. They choose to enjoy the moment, pay less attention to social norms and labels that others use to standardize themselves.

Research indicate that happiness or subjective well-being (SWB) could be used to show how people experience their quality of life, including emotional response and cognitive judgment (Deiner, 1984). In addition, the essence of indulgence is the extent to which people can enjoy the happiness of life and pursue leisure in their own culture. In this way, people from indulgence culture would have a more emotional response toward the thing which could bring them happiness and thus have the following cognitive judgment. Since animated images could bring more liking, enjoyment emotion to the user and psychological stimulate (Sundar & Kalyanaraman, 2004). This study will test the following hypotheses:

H4 e_1 People with high indulgence scores are more likely to have higher stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low indulgence scores.

H4 e_2 People with high indulgence scores are more likely to have higher stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low indulgence scores.

H4 e_3 People with high indulgence scores are more likely to have higher stimulate emotional dominance by animated images on the electronics' product page, which induce their

perceived website credibility and thus enhance their purchase intention than those have low

indulgence scores.

2.6.6. Long-term Orientation

According to Hofstede (2001), "Long-Term Orientation (LTO) stands for the fostering of virtues oriented towards future rewards, [...]. Its opposite pole, Short-Term Orientation, stands for the fostering of virtues related to the past and present [...]." More specifically, long-term positioning refers to people's determination to face future challenges. In that way, people with high long-term orientation score are more willing to abundant current profits to achieve the desired success (Grimsley, 2011). Conversely, people with high short-term orientation score would like to focus on current responsibilities rather than on future achievements.

Marcus (2000) pointed out that a culture with a lower LTO level would consider more about the directness of the outcome and the achievement of the goal to be an important issue compared to the higher LTO culture. Hofstede and Bond (1991) concluded that the goal of Asian countries (high LTO) is to practice, patient, and persevering, while Western countries (LTO) tend to believe and seek truth. In that way people with low LTO score prefer the clean functional design and aim at achieving goals quickly (Marcus & Gould, 2000). On contrast, people with high LTO score requires more patience to achieve navigational and functional goals (Marcus & Gould, 2000). In contrast, Marcus and Gould (2000) found that short-term orientation customers would like to pay more attention to website design, symbols and visual cues than long-term customers, which may

cause more wave flow of emotion. Since animation is an important element of the website's visual design (Cyr et al., 2006). Following these arguments, this study will investigate the hypotheses:

$H4f_1$ People with high long-term orientation scores are more likely to have higher stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low long-term orientation scores.

$H4f_2$ People with high long-term orientation scores are more likely to have higher stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low long-term orientation scores.

$H4f_3$ People with high long-term orientation scores are less likely to passively stimulate emotional dominance by animated images on the electronics' product page, as well as their following perceived website credibility and purchase intention than those have low long-term orientation scores.

Table 2.1: Summary of hypothesis

H1: Pleasure and perceived website credibility will serially mediate the relationship between the animated images and the purchase intention, such that animated images will elicit greater emotional pleasure which will induce higher perceived website credibility, thus leading to higher purchase intention than static images on the electronics' product pages.

H2: Arousal and perceived website credibility will serially mediate the relationship between the animated images and the purchase intention, such that animated images will elicit greater emotional arousal which will induce higher perceived website credibility, thus leading to higher purchase intention than static images on the electronics' product pages.

H3: Dominance and perceived website credibility will serially mediate the relationship between the animated images and the purchase intention, such that animated images will elicit greater emotional dominance which will induce higher perceived website credibility, thus leading to higher purchase intention than static images on the electronics' product pages.

H4a$_1$ People with high collectivism scores are more likely to passively stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high individualism scores.

H4a$_2$ People with high collectivism scores are more likely to passively stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high individualism scores.

H4a$_3$ People with high collectivism scores are less likely to passively stimulate emotional dominance by animated images on the electronics' product page, their following perceived website credibility and purchase intention than those with high individualism scores.

H4b$_1$ People with high masculine score are more likely to passively stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high feminine scores.
H4b$_2$ People with high masculine score are more likely to passively stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high feminine scores.
H4b$_3$ People with high masculine score are more likely to passively stimulate emotional dominance by animated images on the electronics' product, which induce their perceived website credibility and thus enhance their purchase intention page than those with high feminine scores.
H4c$_1$ People have high Power Distance scores are more likely to have less stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low Power Distance scores.
H4c$_2$ People have high Power Distance scores are more likely to have less stimulate emotional Arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low Power Distance scores.

H4c$_3$ People have high Power Distance scores are less likely to passively stimulate emotional dominance by animated images on the electronics' product page, as well as their following perceived website credibility and purchase intention than those have low Power Distance scores.
H4d$_1$ People have high uncertainty avoidance scores are more likely to have less stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low uncertainty avoidance scores.
H4d$_2$ People have high uncertainty avoidance scores are more likely to have less stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low uncertainty avoidance scores.
H4d$_3$ People have high uncertainty avoidance scores are more likely to passively stimulate emotional dominance by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low uncertainty avoidance scores.
H4e$_1$ People with high indulgence scores are more likely to have higher stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low indulgence scores.

H4e$_2$ People with high indulgence scores are more likely to have higher stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low indulgence scores.

H4e$_3$ People with high indulgence scores are more likely to have higher stimulate emotional dominance by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low indulgence scores.

H4f$_1$ People with high long-term orientation scores are more likely to have higher stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low long-term orientation scores.

H4f$_2$ People with high long-term orientation scores are more likely to have higher stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low long-term orientation scores.

H4f$_3$ People with high long-term orientation scores are less likely to passively stimulate emotional dominance by animated images on the electronics' product page, as well as their following perceived website credibility and purchase intention than those have low long-term orientation scores.

3. Research methodology

This study focuses on the visceral emotion, credibility judgments and purchase intention caused by the animated images on the product pages. For this reason, an experiment was constructed to elicit emotional responses to a set of stimuli. More specifically participants would visit the website first and then fill the self-reported questionnaire. In order to test the culture differences along customers, data collections from different cultures and analysis techniques were used. Four steps needed to be completed in order to carry out the study: select culture samples, make fake product pages, built up measurements to the research variables and solve semantic equivalence issue.

3.1. Culture sample

According to the report of the Global Reach in 2004, more than 736.6 million people were using Internet access (Cyr et al., 2005). Moreover, the primary language of these internet users is English (35.6%), followed by Chinese (12.2%) (Cyr et al, 2005). Since people who have different cultural values have different psychological reactions towards visual design elements (Neilson,1996), these research focus on the users in North America (America, Canada) and China which are primary users for the website in English and Chinese. In this study, culture values are examined with an individual respondent's level.

3.2. This study research procedures

The study required a means of understanding subjects' emotional flow (pleasure, arousal, and dominance), the direction of the judgment (credible or not credible) and purchase intention (buy or

not buy). The study also required a stimuli (product page) of varying design/format of image treatment that subjects could judge. The design of the web sites needed to be carefully controlled so that judgments could be compared across cultures for the same stimuli. Referring to the experiment method used by Robins and Holmes (2008), the experiment in this study is carried out by three steps: select subjects, select stimuli, and procedural design.

Participants. Overall, 320 participants were invited to participate in the experiment and 305 valid questionnaires have been collected, in which 154 were collected from China while 151 were collected from America and Canada. Participants were divided randomly between two groups (animated images group and static images group). In each culture, half of the respondents received each version.

Preparation of fake pages. There were two versions of a fake electronic product page: one with animated images on the page, and the other with static images. Fake pages with the same content were designed. None of the content will be altered, only the appeal method of the image.   Since the content on the product pages in Chinese and English are needed to be the same (images, product introductions, and page structure), Huawei's product page was chosen as a template for fake pages. The content and structure of fake pages similar to HUAWEI Mate X's website product page. Name and logo were changed to "Howi Mate S" to avoid brand impact. Subjects were first shown the fake page and then they were asked to fill a questionnaire. The whole procedure lasts 10 minutes.

Defining a new category of mobile devices by adopting flexible display. The soft screen can bend and stretch numerous times without compromise. Prepared to be surprised by its innovation and groundbreaking performance.
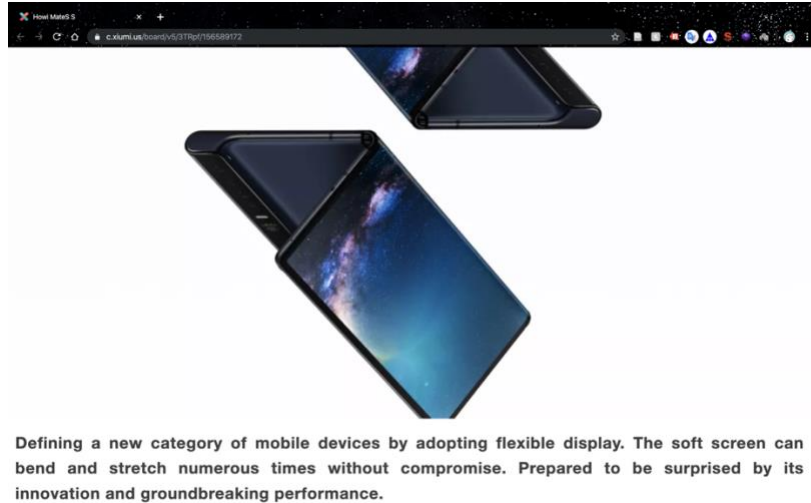
Figure 3.1: Howi Mate S's product page in English

毫厘间，尽藏不凡科技；柔性里，处处技高一筹。创新柔性材质，精湛工艺雕琢，以科技诠释风抚柳浪之柔美。强韧牢靠，从容应对开合折叠。靓丽折叠屏，清晰锐利，饱和明亮，三面之美，面面俱到。

Figure 3.2: Howi Mate S's product page in Chinese

Visibility of the study. Since the Mturk platform allows researchers to attach designed Qualtrics's URL and 51 Survey allowed researchers to embed the website page before the questionnaire, Mturk and its Chinese equivalent: 51 Survey were used to collect survey data from North America and China, respectively. Before entering the questionnaire, respondents have to ensure that they are 18 years old or older. At the end of the survey, the participants were informed

that the fake website was Huawei Mate X's product page, and the submission meant that they agreed with this situation.

Since the website page and the questionnaires were presented to people from different cultures, the semantic equivalence issue which make sure the researchers tested same things along people from various culture backgrounds was needed.

3.3. Semantic equivalence

Semantic equivalence refers to the translated word or expression that has a similar meaning to the item before the translation. In this research, the semantic equivalence issue has been solved in several ways. First, the questionnaire referred to the advice of cross-cultural projects (Douglas and Craig, 1983; Mullen, 1995). More specifically, we used a lot of additional response hints and relatively detailed instructions to help ensure that each item has a clear context (Sekaran, 1983).

Secondly, since the questionnaire was designed in English, we used translation/reverse translation (Brislin et al., 1973; Douglas and Craig, 1983) to help ensure semantic equivalence. A Chinese native speaker translated the questionnaire into Chinese, then a different Chinese translator translated the Chinese version into English. Next, an English native speaker was asked to compare the original and back-translated versions for equivalence. According to his feedback, we revised some translation in the Chinese version and repeated the former process, until the two versions of questionnaires had high equivalence level (Brislin et al., 1973).

3.4. Measurements

In this study, all scales came from previous studies and these studies were established. Pleasure (3 items), arousal (2 items) were tested by 7 point-scale of bipolar scale, while and dominance (4 items) were tested by 9 point-scale of bipolar scale (Mehrabian & Russell, 1974) to measure the visceral emotion. In addition, to measure the website credibility, 4 items that adapted from Meyer (1988)'s research were chosen. All items were measured by 5 point-scale of bipolar scale. To measure the purchase intention, this research chose 4 items that adapted from Dodds (1996)'s research. All items were measured by 7-point Likert-type scales, anchored by (1) "strongly disagree" and (7) "strongly agree".

Lastly, this research used 34 items from Yoo, Donthu and Lenartowicz (2011)'s research to measure cultural dimensions: Power Distance (5 items), Collectivism (6 items), Masculinity (4 items), Uncertainty avoidance (5 items) and Long-term orientation (6 items). To measure the indulgence cultural dimension, the study chose to use the eight elements of the Laroche working paper. All items were 7-point Likert-type scales, anchored by (1) "strongly disagree" and (7) "strongly agree", except the items of "Long-term orientation". 5-point scales were used to measure these items, anchored by (1) "Does not describe me" and (5) "Describes me extremely well", as Yoo, Donthu, and Lenartowicz (2011) did in their research.

4. Results

The collected data was analyzed using SPSS (version 26). This section presents the results of the analysis through overall observations and research questions. Reliability of scales and validity of the research model were first tested and then the serial mediation effects of visceral emotion and website credibility on the relationship between animated images and purchase intention were analyzed. Lastly, the moderation effect of culture value and the moderated mediation effect of visceral emotion and website credibility would be tested. The following sections showed a detailed analysis process.

4.1. Scale and Index Construction

4.1.1. Reliability of the scale

The reliability was tested by the Cronbach's α which is a measure of internal consistency. More specifically, it shows a close relationship between a group of items. In the field of research, it is generally believed that Cronbach's α of 0.7 or higher is acceptable. The table below shows the Cronbach's α results for each measurement structure. All constructs were acceptable (ranging from 0.70-0.94) (Please refer to Table 4.1).

Table 4.1: Constructs, Citations and Cronbach's α

Constructs	Citation	Used Items	Cronbach's α
Pleasure	Mehrabian and Russell （1974）	3	.85
Arousal	Mehrabian and Russell （1974）	2	.72
Dominance	Mehrabian and Russell (1974)	4	.91
Credibility	Meyer (1988)	4	.70
Purchase Intentions	Dodds (1996)	4	.94
Indulgence	Laroche (2017) working paper	8	.82
Power Distance	Yoo, Donthu and Lenartowicz (2011)	5	.86
Uncertainty avoidance	Yoo, Donthu and Lenartowicz (2011)	5	.83
Collectivism	Yoo, Donthu and Lenartowicz (2011)	6	.91
Long-term orientation	Yoo, Donthu and Lenartowicz (2011)	6	.84
Masculinity	Yoo, Donthu and Lenartowicz (2011)	4	.85

4.1.2. Validity of the research model

KMO tests how well the sampling fits research model. This test measures the sampling adequacy of each variable in the model and for the whole model. Kaiser (1974) believes that the minimum acceptable value for KMO is 0.5. If the value of KMO is higher than 0.8, it means that the sample is sufficient and suitable for factor analysis. As we can see in the following table, the KMO is 0.879, indicating that samplings in this research is suitable for the structure detection. In addition, the results of Bartlett's test sphericity indicate whether the variables are related and therefore suitable for structural testing. A value less than 0.05 indicates that factor analysis may be useful for further data analysis (Please refer to Table 4.2).

Table 4.2: KMO and Bartlett's test results

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.879
Bartlett's Test of Sphericity	Approx. Chi-Square	10082.861
	df	1485
	Sig.	.000

4.2. Data Analysis

4.2.1. Sample

We collected 305 valid questionnaires, in which 151 belonged to North Americans respondents（American and Canadian）and 154 were from Chinese respondents (Please refer to Table 4.3).

Table 4.3: Demographic sample (n=305)

		Frequency	Percent
Nation	Chinese	154	50.49%
	Canadian	3	.98%
	American	148	48.52%
Gender	female	146	47.87%
	male	159	52.13%
Age	18-25	80	26.23%
	26-33	145	47.54%
	34-41	49	16.07%
	42-49	14	4.59%
	>50	17	5.57%
Education	High school	61	20.00%
	College	81	26.56%
	Bachelor	121	39.67%
	Master	36	11.80%
	Doctor	6	1.97%

To better analyze the mediation and moderation effects, this research split the model into two parts. Firstly, we mainly concentrated on the mediation effect of Visceral emotion (pleasure, arousal, dominance) and web site credibility on the relationship between animated images and

purchase intention. Secondly, we focus on the moderating effect of cultural values on the relationship between animated images and web site credibility.

4.2.2. Serial Mediation

Since we hypothesis a causal relationship between the visceral emotion and website credibility. This research conducted a serial multiple mediation analysis to check whether these two variables mediate the relationship between animated images and purchase intention. 3 dimensions of emotion (Pleasure, Arousal, Dominance) were assessed separately for their serial mediation effect with the web credibility.

The bootstrapping method was used in the multiple-mediation analyses of this study and 5,000 bootstraps resamples were performed (Preacher & Hayes, 2004). In addition, the analysis of the SPSS macro program developed and updated by Preacher and Hayes (2008) was used. Model 6 of this program was chosen to analyze the serial mediation model. A Bootstrap test was performed on the overall data. Four variables were controlled: nation, gender, age, education.

Firstly, we conducted a mediation analysis to test for a serial mediation effect of pleasure and web credibility on the relationship between animated images and purchase intention. The animated images condition was coded as 1, the static images' condition. After running an individual set of regressions, the results showed in Table 4.4 indicated the significant positive relationship between animated images and emotional pleasure (β=.24, p < .05), emotional pleasure and web credibility (β= .60, p< .001), web credibility and purchase intention (β= .17, p< .01). The mediating effect of pleasure and website credibility on the relationship between animated images and purchase intention are significant (Please refer to Table 4.4).

Bootstrap analysis with 5,000 samples generated a bias-corrected 95%CI indicating a nonsignificant direct effect of animated images on the purchase intention (β=.10, SE=.09, bias-corrected 95%CI= [-.08, .28]) , but a significant total indirect effect (β=.02, SE=.01, bias-corrected 95%CI= [.01, .06]) (Please refer to Table 4.5). This observed result shows that pages with animated images could induce higher pleasure which in turn to cause higher website credibility, thus increase

higher viewers' purchase intention than pages with static images on the electronic product page (Hypothesis H1 accepted).

Table 4.4: The mediating effect of pleasure and website credibility on the relationship between animated images and purchase intention

Predictors	Model 1: Pleasure		Model 2: Website credibility		Model 3: Purchase intention	
	β	t	β	t	β	t
Nation	-.19	-2.96**	-.08	-1.65	-.09	-1.75
Gender	.05	.41	.02	.19	.02	.16
Age	.02	.26	-.05	-.96	-.07	-1.46
Education	.09	1.4	.03	.69	-.01	-.12
Animated images	.24	2.14*	.01	.15	.10	1.08
Pleasure			.60	12.81***	.44	7.38***
Web credibility					.17	2.89**
R^2	.05		.39		.37	
F	3.43**		32.10***		24.55***	

NOTE. - Animated images =1 - Product page with animated images, Animated images =0 - Product page with static images; All variables in model have been standardized, * p≤.05, ** p≤.01, *** p≤.001, two tails, the same as below.

Table 4.5: Testing pleasure and web credibility in mediation models between animated images and purchase intention with bootstrapping

Effect Type	Effect	Boot SE	Bootstrap 95% CI	
			BootLLCI	BootULCI
Total Indirect effect	.13	.06	.01	.26
Img→P→PI	.11	.05	.01	.21
Img→WC→PI	.01	.02	-.03	.04
Img→P→WC→PI	.02	.01	.01	.06

NOTE. - Img =1 - Product page with animated images, Img = 0 - Product page with static images;

P= Pleasure, WC=Web credibility, PI=Purchase intention

Secondly, we repeated the same process as the former analysis to test for a serial mediation effect of arousal and web credibility on the relationship between animated images and purchase intention. The result of the individual set of regressions (Please refer to Table 4.6) indicated a significant positive relationship between animated images and emotional arousal (β=0.24, $p < .05$), emotional arousal and web credibility (β=0.51, $p< .001$), web credibility and purchase intention (β=0.28, $p< .01$). The mediating effect of arousal and website credibility on the relationship between animated images and purchase intention are significant (Please refer to Table 4.6).

Testing arousal and web credibility in mediation models between animated images and purchase intention with Bootstrap analysis with 5,000 samples generated a bias-corrected 95%CI indicating a nonsignificant direct effect of animated images on the purchase intention (β=.12, SE=.10, bias-corrected 95%CI= [-.07, .31]) , but indicating a significant total indirect effect (β=.03, SE=.02, bias-corrected 95%CI= [.01, .07]) (Please refer to Table 4.7). People would feel higher arousal when they visit an electronics' product page with animated images, and then have higher perceived website credibility, thus have higher purchase intention than visiting pages with static images. This result confirms hypothesis H2 which believes that arousal and perceived website credibility will serially mediate the relationship between the animated images and the purchase intention.

Table 4.6: The mediating effect of arousal and web credibility on the relationship between animated images and purchase intention

Predictors	Model 1: Arousal		Model2: Web credibility		Model3: Purchase intention	
	β	t	β	t	β	t
Nation	-.14	-2.25*	-.12	-2.25*	-.11	-2.03*
Gender	.09	.77	-.01	-.01	.01	.05
Age	.05	.77	-.06	-1.19	-.07	-1.44
Education	.07	1.16	.05	.94	.01	.05
Animated images	.24	2.08*	.04	.37	.12	1.25
Arousal			.51	10.50***	.29	4.99***
Web credibility					.28	4.82***
R_2	.04		.31		.31	
F	2.27*		22.58***		18.93***	

NOTE. - Animated images =1 - Product page with animated images, Animated images =0 - Product page with static images; All variables in model have been standardized, * p≤.05, ** p≤.01, *** p≤.001, two tails, the same as below

Table 4.7: Testing arousal and web credibility in mediation models between animated images and purchase intention with bootstrapping

Effect Type	Effect	Boot SE	Bootstrap 95%CI	
			BootLLCI	BootULCI
Total Indirect effect	.11	.06	.01	.22
Img→A→PI	.07	.04	.01	.15
Img→WC→PI	.01	.03	-.04	.07
Img→A→WC→PI	.03	.02	.01	.07

NOTE. - Img =1 - Product page with animated images, Img = 0 - Product page with static images;

A= Arousal, WC= Web credibility, PI= Purchase intention

Lastly, we tested the serial mediation effect of emotional dominance and web credibility on the relationship between animated images and purchase intention. The result of the individual set of regressions (Please refer to Table 4.8) indicated that there was no relationship between animated images, dominance and website credibility.

Testing dominance and web credibility in mediation models between animated images and purchase intention with bootstrap analysis with 5,000 samples generated a bias-corrected 95%CI indicating a little direct effect of animated images on the purchase intention (β=.2, SE=.08, bias-corrected 95%CI= [.02, .37]) , and a nonsignificant total indirect effect (β=-.01, SE=.01, bias-corrected 95%CI= [-.02, .02]) (Please refer to Table 4.9). When people visit the electronics' product pages with animated images, they have similar emotional dominance, perceived website credibility but little higher purchase intention as visiting pages with static images. This result rejected our hypothesis H3 which hypothesizes that animated images will elicit greater emotional dominance which will induce higher perceived website credibility, thus leading to higher purchase intention than static images on the electronics' product pages.

Table 4.8: The mediating effect of dominance and web credibility on the relationship between animated images and purchase intention

Predictors	Model 1: Dominance		Model2: Web credibility		Model3: Purchase intention	
	β	t	β	t	β	t
Nation	-.43	-7.26***	-.02	-.25***	.06	1.17
Gender	.16	1.45	-.02	-.19	-.05	-.54
Age	.02	.38	-.05	-.83	-.07	-1.59
Education	.05	.95	.06	1.12	.01	-.04
Animated images	-.01	-.07	.16	1.55	.20	2.28
Dominance			.42	7.40	.52	10.00***
Web credibility					.24	4.92***
R^2	.17		.20		.44	
F	12.52***		12.75 ***		33.25***	

NOTE. - Animated images =1 - Product page with animated images, Animated images =0 - Product page with static images; All variables in model have been standardized, * p≤.05, ** p≤.01, *** p≤.001, two tails, the same as below

Table 4.9: Testing dominance and web credibility in mediation models between animated images and purchase intention with bootstrapping

Effect Type	Effect	Boot SE	Bootstrap 95%CI	
			BootLLCI	BootULCI
Total Indirect effect	.03	.07	-.11	.17
Img→D→purchase	-.01	.05	-.12	.10
Img→WC→purchase	.04	.02	-.01	.09
Img→D→WC→purchase	-.01	.01	-.02	.02

NOTE. - Img =1 - Product page with animated images, Img = 0 - Product page with static images;

D= Dominance, WC= Web credibility, PI= Purchase intention

4.2.3. Moderated Mediation Analysis

Finally, we tested the moderated mediation in which animated images was independent variable, each dimension of culture value as the moderator, each dimension of visceral emotion as mediator, and the purchase intention as the dependent variable in the model. Since dominance has no mediation effect on the relationship between animated images and purchase intention, we didn't test its moderated mediation effect. A powerful bootstrapping method was proposed to test the statistical significance of the moderated mediation model (Edwards and Lambert, 2007; Ozer, 2011). Model 83 of this program was chosen to analyze the moderated mediation effect.

We first test the moderating effect of cultural values on the relationship between animated images and pleasure, we put an interaction of a dimension of culture value and animated image at a time in the model. Then we found that interactions of animated images and collectivism (β= .08, p=.48), interactions of animated images and Indulgence (β= -.01, p=.96), interactions of animated images and Power Distance (β= -.10, p=.38), interactions of animated images and Uncertainty Avoidance (β=-.16, p=.16), interactions of animated images and Long-term Orientation (β=-.15, p=.18), interactions of animated images and Masculism (β=-.02, p=.83) were all nonsignificant (Please refer to Table 4.10).

A 5000 resample bootstrap analysis also returned an overall nonsignificant conditional indirect effect with the moderator: collectivism (β= .01, SE= .01, bias-corrected 95% CI = [-.02, .04]), Indulgence (β= -.01, SE= .01, bias-corrected 95% CI = [-.03, .03]), Power Distance (β= -.01, SE= .01, bias-corrected 95% CI = [-.03, .01]), Uncertainty Avoidance (β= -.02, SE= .02, bias-corrected 95% CI = [-.05, .01]), Long-term Orientation (β= -.01, SE= .02, bias-corrected 95% CI = [-.05, .01]) and Masculism (β= -.01, SE= .01, bias-corrected 95% CI = [-.03, .02]).

This result means for people from different culture, their emotional pleasure toward the animated images are almost the same and also their following perceived website credibility and purchase intention.

Table 4.10: The moderation effect of culture value on the relationship between animated images and pleasure

regression equation(N=305)		Indices of fit			Standardized Coefficients	
Dependent Variable	Variable	R	R_2	F	β	t
Pleasure	Img	.42	.18	9.24***	.20	1.94
	CLV				.33	4.66***
	Img*CLV				.08	.71
Pleasure	Img	.26	.07	3.13**	.24	2.17*
	Indul				.12	1.57
	Img*Indul				-.01	-.05
Pleasure	Img	.31	.10	4.67***	.15	1.36
	PD				.28	3.18**
	Img*PD				-.10	-.88
Pleasure	Img	.33	.11	5.32***	.26	2.37*
	UA				.31	3.94**
	Img*UA				-.16	-1.41
Pleasure	Img	.37	.14	6.88***	.22	2.03**
	Long				.36	4.79***
	Img*Long				-.15	-1.35
Pleasure	Img	.39	.16	7.83***	.17	1.60
	Mas				.36	4.46***
	Img*Mas				-.02	-.21

NOTE. - Img =1 - Product page with animated images, Img = 0 - Product page with static images; CLV=collectivism, Indul= Indulgence, PD=Power Distance, UA=Uncertainty Avoidance, Long=Long-term Orientation, Mas= Masculism; All variables in model have been standardized, * p≤.05, ** p≤.01, *** p≤.001, two tails.

In addition, to test the moderating effect of cultural values on the relationship between animated images and arousal, we re-put an interaction of a dimension of culture value and animated image at a time in the model. We regressed animated image, a culture value variable, and their interaction in a regression analysis and found from table 12 that interactions of animated images and collectivism (β=.09, p=.43), interactions of animated images and Indulgence (β=-.01, p=.98), interactions of animated images and Power Distance (β= -.14, p=.23), interactions of animated

images and Uncertainty Avoidance (β=-.01, p=.90), interactions of animated images and Long-term Orientation (β=-.04, p=.75), interactions of animated images and Masculism (β=0.06, p=.56) were all nonsignificant (Please refer to Table 4.11).

A 5000 resample bootstrap analysis also returned an overall nonsignificant conditional indirect effect with the moderator: collectivism (β= .01, SE= .02, bias-corrected 95% CI = [-.02, .05]), Indulgence (β= -.01, SE= .02, bias-corrected 95% CI = [-.03, .03]), Power Distance (β= -.02, SE= .02, bias-corrected 95% CI = [-.05, .01]), Uncertainty Avoidance (β= -.01, SE= .02, bias-corrected 95% CI = [-.04, .04]), Long-term Orientation (β= -.01, SE= .02, bias-corrected 95% CI = [-.04, .03]) and Masculism (β= .01, SE= .02, bias-corrected 95% CI = [-.02, .05]).

This result indicates that for people from different culture, their emotional arousal toward the animated images are almost the same and also their following perceived website credibility and purchase intention.

Table 4.11: The moderation effect of culture value on the relationship between animated images and arousal

regression equation(N=305)		Indices of fit			Standardized Coefficients	
Dependent Variable	Variable	R	R_2	F	β	t
Arousal	Img	.35	.13	6.06***	.21	1.89
	CLV				.27	3.65***
	Img*CLV				.09	.80
Arousal	Img	.23	.05	2.38*	.24	2.11*
	Indul				.13	1.65
	Img*Indul				-.01	-.02
Arousal	Img	.26	.07	2.96**	.17	1.47
	PD				.24	2.75**
	Img*PD				-.14	-1.20
Arousal	Img	.31	.10	4.50***	.26	2.32*
	UA				.26	3.25**
	Img*UA				-.01	-.13
Arousal	Img	.34	.12	5.56***	.21	1.95
	Long				.31	4.01***
	Img*Long				-.04	-.32
Arousal	Img	.34	.12	5.60**	.18	1.60
	Mas				.27	3.32
	Img*Mas				.06	.58

NOTE. - Img =1 - Product page with animated images, Img = 0 - Product page with static images; CLV=collectivism, Indul= Indulgence, PD=Power Distance, UA=Uncertainty Avoidance, Long=Long-term Orientation, Mas= Masculism; All variables in model have been standardized, * p≤.05, ** p≤.01, *** p≤.001, two tails.
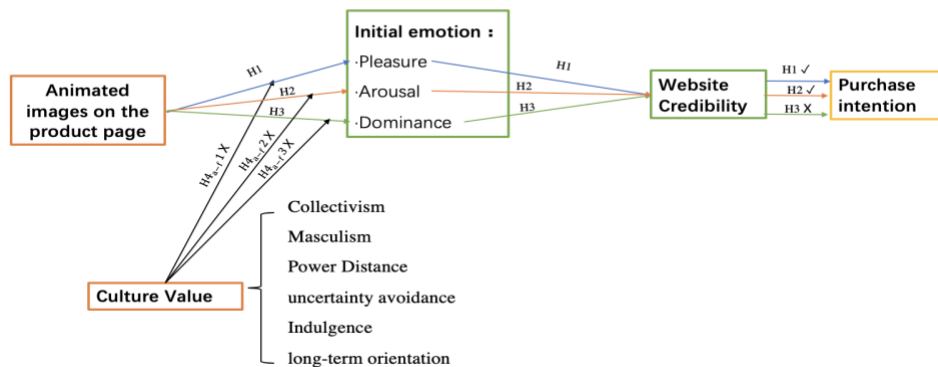

Figure 4.1: The research model and the summary of supported and rejected hypotheses

Table 4.12: Summary of supported and rejected hypotheses

Hypotheses	Descriptive	Result
H1	Pleasure and perceived website credibility will serially mediate the relationship between the animated images and the purchase intention, such that animated images will elicit greater emotional pleasure which will induce higher perceived website credibility, thus leading to higher purchase intention than static images on the electronics' product pages.	supported
H2	Arousal and perceived website credibility will serially mediate the relationship between the animated images and the purchase intention, such that animated images will elicit greater emotional arousal which will induce higher perceived website credibility, thus leading to higher purchase intention than static images on the electronics' product pages.	supported
H3	Dominance and perceived website credibility will serially mediate the relationship between the animated images and the purchase intention, such that animated images will elicit greater emotional dominance which will induce higher perceived website credibility, thus leading to higher purchase intention than static images on the electronics' product pages.	Rejected
H4a$_1$	People with high collectivism scores are more likely to passively stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high individualism scores.	Rejected
H4a$_2$	People with high collectivism scores are more likely to passively stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high individualism scores.	Rejected
H4a$_3$	People with high collectivism scores are less likely to passively stimulate emotional dominance by animated images on the electronics' product page, their following perceived website credibility and purchase intention than those with high individualism scores.	Rejected

Table 4.12: Summary of supported and rejected hypotheses (continued)

Hypotheses	Descriptive	Result
$H4b_1$	People with high masculine score are more likely to passively stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high feminine scores.	Rejected
$H4b_2$	People with high masculine score are more likely to passively stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those with high feminine scores.	Rejected
$H4b_3$	People with high masculine score are more likely to passively stimulate emotional dominance by animated images on the electronics' product, which induce their perceived website credibility and thus enhance their purchase intention page than those with high feminine scores.	Rejected
$H4c_1$	People have high Power Distance scores are more likely to have less stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low Power Distance scores.	Rejected
$H4c_2$	People have high Power Distance scores are more likely to have less stimulate emotional Arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low Power Distance scores.	Rejected
$H4c_3$	People have high Power Distance scores are less likely to passively stimulate emotional dominance by animated images on the electronics' product page, as well as their following perceived website credibility and purchase intention than those have low Power Distance scores.	Rejected
$H4d_1$	People have high uncertainty avoidance scores are more likely to have less stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low uncertainty avoidance scores.	Rejected

Table 4.12: Summary of supported and rejected hypotheses (continued)

Hypotheses	Descriptive	Result
H4d$_2$	People have high uncertainty avoidance scores are more likely to have less stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low uncertainty avoidance scores.	Rejected
H4d$_3$	People have high uncertainty avoidance scores are more likely to passively stimulate emotional dominance by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low uncertainty avoidance scores.	Rejected
H4e$_1$	People with high indulgence scores are more likely to have higher stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low indulgence scores.	Rejected
H4e$_2$	People with high indulgence scores are more likely to have higher stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low indulgence scores.	Rejected
H4e$_3$	People with high indulgence scores are more likely to have higher stimulate emotional dominance by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low indulgence scores.	Rejected
H4f$_1$	People with high long-term orientation scores are more likely to have higher stimulate emotional pleasure by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low long-term orientation scores.	Rejected
H4f$_2$	People with high long-term orientation scores are more likely to have higher stimulate emotional arousal by animated images on the electronics' product page, which induce their perceived website credibility and thus enhance their purchase intention than those have low long-term orientation scores.	Rejected

Table 4.12: Summary of supported and rejected hypotheses (continued)

Hypotheses	Descriptive	Result
H4f$_3$	People with high long-term orientation scores are less likely to passively stimulate emotional dominance by animated images on the electronics' product page, as well as their following perceived website credibility and purchase intention than those have low long-term orientation scores.	Rejected

5. Discussion

5.1. General discussion

Previous studies mainly focus on the effect of animated images in Web ads (Lang et al. 2002; Heo and Sundar, 2000). Very few research have looked at the role of website's animated images in the website's judgment and online purchasing process, especially in electronics' products environment. This particular study demonstrates how and why animated images can affect purchase intention though visceral emotion and perceived website credibility on the website condition taking culture value into account to test its moderating effect.

We first investigated the serial-mediating effect of visceral emotion (pleasure, arousal, and dominance) and perceived site credibility on the relationship between the animated images on the electronics' product pages and the purchase intention.

Based on the results, pleasure (H1) and arousal (H2) as dimensions of visceral emotion played a serial mediating role with perceived site credibility, indicating that animated images will elicit greater emotional pleasure and arousal. It will induce higher perceived website credibility, leading to higher purchase intention than static images on the electronics' product pages. This result is in line with prior findings which believed that animated images could elicit stronger psychological effects (Sundar & Kalyanaraman, 2004), such as pleasure and arousal than the static ones. Previous studies confirmed that emotional pleasure could impact the individual's judgment in the direction of emotional (Forgas, 1995; Isen, Shalker, Clark, & Karp, 1978; Laird, Wagener, Halal, & Szegda,

1982). In this study, the perception of website credibility was included, it was considered part of an individual's judgment. Results support the conclusion of other studies done in this area: website credibility could influence customer's behavior and intention to purchase online positively (George et al., 2016; Toufaily et al., 2013).

When customers see the animated images on electronics' product pages, they do not seem to experience any changes in their emotional dominance reaction, their perceived site credibility and purchase intention are similar than in static images web context (H3 was rejected). Unfortunately, this result is not in line with other studies where researchers have found that higher aesthetic perception could trigger a higher perception of usability (Kurosu and Kashimura 1995, Tractinsky 1997) and improve customer's emotional dominance (Porat & Tractinsky, 2012). A possible reason is that the participants were controlled through instructions in the experiment, thus people's dominance emotion may not be changed with different web cues (Ha & Lennon, 2010). In addition, a previous study found that consumer behavior could not, or little be impacted by dominance (Donovan et al., 1994). Therefore, numerous environmental researches decided to use just pleasure and arousal to explain customer's emotional response and ignore the emotional dominance (Eroglu, Machleit, & Davis, 2003; Menon & Kahn; 2002; Sherman, Mathur, & Smith, 1997; Wu, Cheng, & Yen, 2008). Moreover, this research used the cellphone as a stimulus, since cellphones are very common in people's life, it is hard to relate them with the e-culture and influence customers' following judgment process. Thus, we could conclude that dominance has no mediation effect on the relationship between animated images on the electronic's product pages and perceived website credibility.

This study focused on the moderating role of cultural values on the relationship between the animated images and visceral emotion. Since the moderating effect of the six dimensions of culture values were all rejected when looking at animated images on the electronic's product pages, our conclusion indicates no differences in the individuals from the emotional flow to the perceived site credibility and purchase intention. However, Cyr and his colleagues (2005) found that people from

different countries have different preferences in website characteristics such as information design, visual design, and navigation design and trust. The differences between the finding of former researchers and this study could be explained by several reasons. First and foremost, although the emotional flow towards animated images is little different between different cultures, the animated images could positively impact customers' emotional pleasure and arousal for people from all cultures. This result is consistent with the Motion Effect Theories: humans have an inherent preference for moving objects. People from various cultures could focus their attention on moving images and process relevant information (Sundar & Kalyanaraman, 2004), and it could trigger their emotional response. Another reason could be that, with the development of the website creation and development in a global market, animated images become common practice in product web layout pages, especially the electronics' product pages. For instance, Chinese customers even though have a higher long-term orientation, Power Distance, collectivism and uncertainty avoidance score, may feel less stimulation than before. Thus, we conclude that culture value does not directly influence the relationship between the animated images and vesical emotion.

5.2. Managerial implications

From a practical perspective, our findings indicate that animated images on the electronic's product pages could positively impact certain aspects of emotional response as well as the following perceived credibility and purchase intention. Thus, for website designers and multimedia producers who are concerned with the cost of creating animated images on their website, their intuition and current practice are confirmed by this study. Instead of using static images on the product pages, electronic companies should use more animated images to demonstrate and show their product/service.

The current global business world suggests to multinational companies' website localization. The results of this study indicate that animated images have a similar effect on customers' emotional flow and their behavioral response. The website creator/manager could emphasize

animated product images instead of making two versions of static images to adjust to the tastes of different cultures.

Lastly corporations should develop a code of conduct of what is acceptable or not when deciding to launch on an animation strategy. Website designers should be educated to basic ethical behaviors in order to avoid major pitfalls that may directly or indirectly impact the corporate responsibility of the organization. When using animated images, we know that they will impact the mind of the viewers. One must be careful that children, young adults, vulnerable individuals can be impacted on the vision of these product animations. Thus, to show more aspects of the products is recommended, however, exaggerating products and "playing with customer's emotions" may be delicate. It will increase customers' expectations towards the products/service and it may cause a judgment of unethicality and influence customers' behaviors (Creyer, 1997).

6. Limitations and future directions

There are several limitations to this research. First, this research only focused on the animated images on the electronic's product pages. In future studies, researchers could examine the customer's emotional response to animated images of different products' product pages. Since animated image lasts more time than the static image, it could not only attract customer's attention, but also transfer more information (Matthews, Benjamin, & Osborne, 2007). Thus, maybe animated images could trigger more perception of website usability on cultural product's product page, for example bags or clothes with more cultural features, as well as their emotional dominance response.

Second, researchers could collect data from more diverse cultures, since this research just collected data from China and North America. Future researches could collect data from Japan, India or Europe, which have quite different culture values with North America and China. It is interesting to see whether the culture value plays the role of moderator on the relationship between the animated images and emotion in other cultures. However, they should be careful on how they

do it to respect culture specificities, laws and ethical moral aspects around privacy and data collection.

Thirdly, as this study only focus on the emotional response towards the moving images, future researchers could also test the effects of exercise on the physiological field, for example the electroencephalography (EEG) and memory testing, these result could enable people to understand how moving images affects cortical arousal and other cognitive processes (Detenber, Simons, & Bennett, 1998). As opposed to arm's length methodologies, these new approaches will require additional diligent application in terms of what is or not acceptable for an individual and/or a group.

Lastly, we admit that the customers' consideration of ethical issues has been neglected in this research. We were preoccupied with movement of web design and first impact on the individual/collectivity. The era of intelligent machines will create major problems on what we can or cannot do to respect the human and avoid miscommunication or any abuse on the mental health of individuals and/or collectivities. Thus, manipulating the image and/or working on impressive management practice will require a code of conduct to avoid pitfalls and major problems with customers who may rebel, react, get sick, etc. because overemphasizing animated images may disappoint the customers and cause the judgment of "unethicality". As customers express willingness to reward ethical behavior and punish unethical behavior (Creyer, 1997), we need to develop a decorum of what is acceptable or not in terms of "playing with customer's emotions".

Reference

Ariely, D. (2000). Controlling the information flow: Effects on consumers' decision making and preferences. *Journal of consumer research*, 27(2), 233-248.

Barrett, L. F., & Russell, J. A. (1999). The structure of current affect: Controversies and emerging consensus. *Current directions in psychological science*, 8(1), 10-14.

Barry, T. E., & Howard, D. J. (1990). A review and critique of the hierarchy of effects in advertising. *International Journal of Advertising,* 9(2), 121–131.

Bart, Y., Shankar, V., Sultan, F., & Urban, G. L. (2005). Are the drivers and role of online trust the same for all web sites and consumers? A large-scale exploratory empirical study. *Journal of marketing*, 69(4), 133-152.

Belch, G. E., & Belch, M. A. (2004). *Advertising and Promotion an Integrated Marketing Communications Perspective.* New York.

Berlo, D. K., Lemert, J. B., & Mertz, R. J. (1969). Dimensions for evaluating the acceptability of message sources. *The Public Opinion Quarterly,* 33(4), 563–576.

Bezjian-Avery, A., Calder, B., & Iacobucci, D. (1998). New media interactive advertising vs. traditional advertising. *Journal of advertising research*, 38(4), 23-32.

Brown, S. P., & Stayman, D. M. (1992). Antecedents and consequences of attitude toward the ad: A meta-analysis. *Journal of consumer research,* 19(1), 34-51.

Brengman, M., & Geuens, M. (2004). The four-dimensional impact of color on shoppers' emotions. *Advances in Consumer Research,* 31, 122–128.

Brislin, R. W., Lonner, W. J., & Thorndike, R. M. (1973). Cross-cultural research methods: Comparative studies in behavioral science. *New York, NY: A Wiley-Intersection Publication.*

Brown, J. S. (1986). *From cognitive to social ergonomics and beyond.* In User centered system design (pp. 457-486). CRC Press.

Bruner, G. C., & Kumar, A. (2000). Web commercials and advertising hierarchy-of-effects. *Journal of advertising research*, 40(1-2), 35-42.

Chang, P. L., & Chieng, M. H. (2006). Building consumer–brand relationship: A cross-cultural experiential view. *Psychology & Marketing,* 23(11), 927-959.

Coan, J. A., & Allen, J. J. (Eds.). (2007). *Handbook of emotion elicitation and assessment.* Oxford university press.

Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: development of a measure and initial test. *MIS Quarterly,* 19, 189–211.

Cox, D. B., & Locander, W. B. (1987). Product Novelty: Does it moderate the Relationship between Ad Attitudes and Brand Attitude? *Journal of advertising,* 16(3), 39-44.

Creyer, E. H. (1997). The influence of firm behavior on purchase intention: do consumers really care about business ethics? *Journal of consumer Marketing,* 14(6), 421-432.

Cyr, D. (2008). Modeling Website Design Across Cultures: Relationships to Trust, Satisfaction, and E-Loyalty. *Journal of Management Information Systems,* 24(4), 47–72.

Cyr, D. (2013). Website design, trust and culture: An eight-country investigation. *Electronic Commerce Research and Applications, 12(6), 373–385.*

Cyr, D., & Trevor-Smith, H. (2004). Localization of Web design: An empirical comparison of German, Japanese, and United States Web site characteristics. *Journal of the American society for information science and technology,* 55(13), 1199-1208.

Cyr, D., Bonanni, C., Bowes, J., & Ilsever, J. (2005). Beyond trust: Web site design preferences across cultures. *Journal of Global Information Management (JGIM),* 13(4), 25-54.

Cyr, D., Bonanni, C., Bowes, J., & Ilsever, J. (2005). Beyond trust: Web site design preferences across cultures. *Journal of Global Information Management (JGIM),* 13(4), 25-54.

Cyr, D., Head, M., & Larios, H. (2010). Colour appeal in website design within and across cultures: A multi-method evaluation. *International Journal of Human-Computer Studies,* 68(1), 1–21.

Dao lin, W., & Si Da, L. (2016). The research on "motion Picture" in new media age. doi:10.16824/j.cnki.issn10082832.2016.03.025

De Mooij, M., & Hofstede, G. (2011). Cross-cultural consumer behavior: A review of research findings. *Journal of International Consumer Marketing*, 23(3-4), 181-192.

Deiner, E. (1984). Subjective Well-Being. *Psychological Bulletin*, 95(3), 542-575.

Del Galdo, E., & Neilson, J. (1996). *International user interfaces*. New York: Wiley

Detenber, B. H., & Reeves, B. (1996). A bio-informational theory of emotion: Motion and image size effects on viewers. *Journal of Communication.*

Detenber, Benjamin H., and Byron Reeves (1996), "A Bio-infor- mational Theory of Emotion: Motion and Image Size Effects on Viewers," *Journal of Communication*, 46 (3), 66–84.

Dodds, W. B., & Monroe, K. B. (1985). The effect of brand and price information on subjective product evaluations. *ACR North American Advances.*

Doney, P. M., Cannon, J. P., & Mullen, M. R. (1998). Understanding the influence of national culture on the development of trust. *Academy of management review*, 23(3), 601-620.

Donovan, R. J., Rossiter, J. R., Marcoolyn, G., & Nesdale, A. (1994). Store atmosphere and purchasing behavior. *Journal of Retailing*, 70(3), 284–294.

Donthu, N. & Yoo, B. (1998). Cultural influences on Service Quality expectations. *Journal of Service Research*, 1(2), 178 – 186.

Douglas, S. P., & Craig, C. S. (1983). Examining performance of US multinationals in foreign markets. J*ournal of International Business Studies*, 14(3), 51-62.

Dunn, J. R., & Schweitzer, M. E. (2005). Feeling and believing: the influence of emotion on trust. Journal of personality and social psychology, 88(5), 736.

Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical testing of a model of online store atmospherics and shopper responses. *Psychology & Marketing*, 20(2), 139–150.

Erumban, A. A., and de Jong, S. B. (2006). Cross-country differences in ICT adoption: A consequence of culture? *Journal of World Business*, 41(4), 303–314.

Éthier, J., Hadaya, P., Talbot, J., & Cadieux, J. (2006). B2C web site quality and emotions during online shopping episodes: An empirical study. *Information & Management*, 43(5), 627-639.

Éthier, J., Hadaya, P., Talbot, J., & Cadieux, J. (2008). Interface design and emotions experienced on B2C

Web sites: Empirical testing of a research model. *Computers in Human Behavior,* 24(6), 2771-2791.

Evers, V., & Day, D. (1997). The role of culture in interface acceptance. In *Human-Computer Interaction INTERACT'97* (pp. 260-267). Springer, Boston, MA.

Feldman Barrett, L. & Russell, J. A. (1998). Independence and bipolarity in the structure of affect. *Journal of Personality and Social Psychology*, 74(4), 967–984.

Forgas, J. P. (1995). Mood and judgment: the affect infusion model (AIM). *Psychological bulletin,* 117(1), 39.

Fogg, B. J., Marshall, J., Laraki, O., Osipovich, A., Varma, C., Fang, N., ... & Treinen, M. (2001, March). What makes Web sites credible? a report on a large quantitative study. In Proceedings of the *SIGCHI conference on Human factors in computing systems*, 61-68, ACM.

Fogg, B. J., & Tseng, H. (1999, May). The elements of computer credibility. In *Proceedings of the SIGCHI conference on Human Factors in Computing Systems* (pp. 80-87). ACM.

Franke, R. H., Hofstede, G., & Bond, M. H. (1991). Cultural roots of economic performance: A research note. *Strategic management journal,* 12(S1), 165-173.

Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: an integrated model. *MIS quarterly*, 27(1), 51-90.

George, Joey F, Akmal Mirsadikov and Brian E Mennecke. (2016). Website Credibility Assessment: An Empirical-Investigation of Prominence-Interpretation Theory. *Transactions on Human-Computer Interaction*, 8(2), 40–56.

George, L. S., & Park, C. L. (2016). Meaning in life as comprehension, purpose, and mattering: Toward integration and new research questions. Review of General Psychology, 20(3), 205-220.

Goldsmith, R. E., Lafferty, B. A., & Newell, S. J. (2000). The impact of corporate credibility and celebrity credibility on consumer reaction to advertisements and brands. *Journal of Advertising*, 29(3), 43-54.

Gouveia, V. V., & Ros, M. (2000). Hofstede and Schwartz s models for classifying individualism at the cultural level: their relation to macro-social and macro-economic variables. *Psicothema,* 12(Su1), 25-33.

Green, D. P., Goldman, S. L., & Salovey, P. (1993). Measurement error masks bipolarity in affect ratings. *Journal of personality and social psychology*, 64(6), 1029.

Heo, N., & Sundar, S. S. (2000). Emotional responses to Web advertising: The effects of animation, position, and product involvement on physiological arousal. *In Annual Conference of the Association for Education in Journalism and Mass Communication, Phoenix, AZ.*

Hofstede, G. (2005). G. *Cultures and Organizations: Software of the Mind.* london: McGraw-hill.

Hofstede, G. (1980). Motivation, leadership, and organization: do American theories apply abroad? *Organizational dynamics*, 9(1), 42-63.

Huang, M. H. (2003). Modeling virtual exploratory and shopping dynamics: an environmental psychology approach. *Information & Management,* 41(1), 39-47.

Hui, C. H. (1984). *Development and validation of an individualism-collectivism scale.* No. TR-ONR-31. Illinois Univ at Urbana Dept Of Psychology, 1984.

Garrett, J. J. (2010). *The elements of user experience: user-centered design for the web and beyond.* Pearson

Education.

Janiszewski, C. (1993). Preattentive mere exposure effects. *Journal of Consumer Research*, 20(3), 376-392.

Jarvenpaa, S.L. and Tractinsky, N. (1999) 'Consumer trust in an internet store a cross-cultural validation', J*ournal of Computer-Mediated Communication*, 5(2), 1–35.

Jee, J.&Lee,W.N.(2003). The impact of personal factors on perceived interactivity, attitude toward the web site and brand choice. Paper submitted to the *2002 Conference of the American Academy of Advertising*.

Kalyanaraman, S., & Oliver, M. B. (2001, August). Technology or tradition: Exploring relative persuasive appeals of animation, endorser credibility, and argument strength in web advertising. In annual conference of the association of education in journalism and mass communication, Washington, DC.

Kim, J., & Moon, J. Y. (1998). Designing towards emotional usability in customer interfaces – Trustworthiness of cyber-banking system interfaces. *Interacting with Computers,* 10(1), 1–29.

Kim, Y. H., & Kim, D. J. (2005, January). A study of online transaction self-efficacy, consumer trust, and uncertainty reduction in electronic commerce transaction. *In Proceedings of the 38th Annual Hawaii International Conference on System Sciences* (pp. 170c-170c). IEEE.

Kurosu, M. and Kashimura, K., 1995. Apparent usability versus inherent usability. In: *CHI095 conference companion.* New York: ACM/Addison Wesley, 292–293.

Lang, A., Dhillon, K., & Dong, Q. (1995). The effects of emotional arousal and valence on television viewers' cognitive capacity and memory. *Journal of Broadcasting & Electronic Media*, 39(3), 313-327.

Lang, Jennifer Borse, Kevin Wise, and Prabu David (2002), "Captured by the World Wide Web: Orienting to Structural and Content Features of Computer-Presented Information," *Communication Research*, 29 (3), 215–245.

Lavidge, R. J., & Steiner, G. A. (1961). A model for predictive measurements of advertising effectiveness. *Journal of Marketing,* 25(6), 59–62.

Lavie, T., & Tractinsky, N. (2004). Assessing dimensions of perceived visual aesthetics of web sites. *International journal of human-computer studies*, 60(3), 269-298.

Lemert, J. B. (1963, August). Dimensions of source credibility. In meeting of *Association for Education in Journalism.*

Li, Hairong, and Janice L. Bukovac (1999), "Cognitive Impact of Banner Ad Characteristics: An Experimental Study," *Journalism and Mass Communication Quarterly,* 76 (2), 341– 353.

Lim, L. and Turk, A. (1999) "Individual differences and human computer interaction", Proceedings of the *Western Australian Workshop on Information Systems Research,* WAWISR'99, Murdoch University, 234-244.

Lindgaard, G., Fernandes, G. J., Dudek, C., & Brown, J. (2006). Attention website designers: You have 50 milliseconds to make a good first impression! *Behavior and Information Technology*, 25(2), 115–126.

Lonner, W. J., Berry, J. W., & Hofstede, G. H. (1980). Culture's consequences: International differences in work-related values. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.*

Lutz, R. J., Mackenzie, S. B., & Belch, G. E. (1983). Attitude toward the ad as a mediator of advertising

effectiveness: determinants and consequences. *Advances in consumer research*, 10, 532-539.

Madu, C. N., & Madu, A. A. (2002). Dimensions of e-quality. *International Journal of Quality & reliability management*, 19(3), 246-258.

Mehrabian, A. (1995). Framework for a comprehensive description and measurement of emotional states. *Genetic, Social, and General Psychology Monographs*, 121, 339–361.

Mehrabian, A., & Russell, J. A. (1974). An approach to environmental psychology. the MIT Press.

Mehrabian, A., Wihardja, C., & Ljunggren, E. (1997). Emotional correlates of preferences for situation-activity combinations in everyday life. *Genetic, Social, and General Psychology Monographs*, 123(4), 461–478.

Menon, S., & Kahn, B. (2002). Cross-category effects of induced arousal and pleasure on the Internet shopping experience. *Journal of Retailing*, 78(1), 31–40.

Meyer, B. (1988). *Object-oriented software construction* (Vol. 2, pp. 331-410). New York: Prentice hall.

Norman, D. A. (2004). Emotional design: Why we love (or hate) everyday things. *New York: Basic Books.*

Oppenheimer, Daniel M., Tom Meyvis, and Nicolas Davidenko (2009). "Instructional manipulation checks: Detecting satisficing to increase statistical power." *Journal of experimental social psychology*, 45(4), 867-872.

Ozer, M. (2011). A moderated mediation model of the relationship between organizational citizenship behaviors and job performance. *The Journal of applied psychology, 96(6)*, 1328-36.

Park, S., Choi, D., & Kim, J. (2005). Visualizing e-brand personality: Exploratory studies on visual attributes and e-brand personalities in Korea. *International Journal of Human-Computer Interaction*, 19(1), 7–34.

Petty, R. and Cacioppo, J. (1981). *Attitudes and Persuasion: Classic and Contemporary Approaches.* Dubuque, IA: Brown.

Phelps, J. E., & Hoy, M. G. (1996). The Aad-Ab-PI relationship in children: The impact of brand familiarity and measurement timing. *Psychology & Marketing*, 13(1), 77-105.

Porat, T., & Tractinsky, N. (2012). It's a pleasure buying here: The effects of web-store design on consumers' emotions and attitudes. *Human–Computer Interaction,* 27(3), 235-276.

Ravaja, N. (2004). Effects of image motion on a small screen on emotion, attention, and memory: Moving-face versus static-face newscaster. *Journal of Broadcasting & Electronic Media*, 48(1), 108-133.

Reisenzein, R. (1994). Pleasure-activation theory and the intensity of emotion. *Journal of Personality and Social Psychology*, 67(3), 525–539.

Reeves, B., & Nass, C. I. (1996). *The media equation: How people treat computers, television, and new media like real people and places*. Cambridge university press.

Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological review*, 110(1), 145.

Salam, A. F., Iyer, L., Palvia, P., & Singh, R. (2005). Trust in e-commerce. *Communications of the ACM*, 48(2), 72-77.

Sallam, M. A. (2011). The impact of source credibility on Saudi consumer's attitude toward advertising and purchase intention. *International Journal of Marketing Studies*, 3(4), 63-77.

Sautter, P., Hyman, M. R., & Lukosius, V. (2004). E-tail atmospherics: A critique of the literature and model

extension. *J. Electron. Commerce Res.*, 5(1), 14-24.

Schwartz, S. H. (1994). *Beyond individualism/collectivism: New cultural dimensions of values.*

Shaver, P., Schwartz, J., Kirson, D., & O'connor, C. (1987). Emotion knowledge: further exploration of a prototype approach. *Journal of personality and social psychology*, 52(6), 1061.

Sherman, E., Mathur, A., & Smith, R. B. (1997). Store environment and consumer purchase behavior: mediating role of consumer emotions. *Psychology & Marketing*, 14(4), 361-378.

Shneiderman, B. (1998). *Designing the user interface: strategies for effective human–computer interaction (3rd ed.)*. New York, NY: Addison Wesley Longman.

Sekaran, U. (1983). Methodological and theoretical issues and advancements in cross-cultural research. *Journal of international business studies,* 14(2), 61-73.

Skadberg, Y. X. and Kimmel, J. R. (2003) *Computers in Human Behavior.*

Suh, B., & Han, I. (2003). The impact of customer trust and perception of security control on the acceptance of electronic commerce. *International Journal of electronic commerce,* 7(3), 135-161.

Stacks, D. W., & Salwen, M. B. (Eds.). (2014). *An integrated approach to communication theory and research.* Routledge.

Sundar, S. Shyam, George Otto, Lisa Pisciotta, and Karen Schlag (1997), "Animation and Priming Effects in Online Advertising," paper presented at the *Communication Technology and Policy Division of the annual convention of the Association for Education in Journalism and Mass Communication*, Chicago, August.

Sundar, S. S., Kalyanaraman, S., & Brown, J. (2003). Explicating web site interactivity: Impression formation effects in political campaign sites. *Communication research*, 30(1), 30-59.

Toufaily, E., Souiden, N., & Ladhari, R. (2013). Consumer trust toward retail websites: Comparison between pure click and click-and-brick retailers. *Journal of Retailing and Consumer Services*, 20(6), 538-548.

Toufaily, E., Souiden, N., & Ladhari, R. (2013). Consumer trust toward retail websites: Comparison between pure click and click-and-brick retailers. *Journal of Retailing and Consumer Services*, 20(6), 538-548.

Tractinsky, N., & Lowengart, O. (2007). Web-store aesthetics in e-retailing: A conceptual framework and some theoretical implication. *Academy of Marketing Science Review*, 11(1), 1–18.

Tractinsky, N. (1997, March). Aesthetics and apparent usability: empirically assessing cultural and methodological issues. In Proceedings of the *ACM SIGCHI Conference on Human factors in computing systems* (pp. 115-122). ACM.

Tsikriktsis, N. (2002). Does Culture Influence Website Quality Expectations? An Empirical Study. *Journal of Service Research*, 5(2), 101–112.

Warner, R. M. (2008). *Applied statistics: From bivariate through multivariate techniques*. Sage.

Whitehead Jr, J. L. (1968). Factors of source credibility. *Quarterly Journal of Speech*, *54*(1), 59-63.

Wu, C. S., Cheng, F. F., & Yen, D. C. (2008). The atmospheric factors of online storefront environment design : An empirical experiment in Taiwan. *Information & Management*, 45(7), 493-498.

Yi, Y. (1990). Cognitive and affective priming effects of the content for print advertisements. *Journal of Advertising*, 19(2), 40-48.

Yik, M. S., Russell, J. A., & Barrett, L. F. (1999). Structure of self-reported current affect: Integration and beyond. *Journal of personality and social psychology,* 77(3), 600.

Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's five dimensions of cultural values at the individual level: Development and validation of CVSCALE. *Journal of international consumer marketing*, 23(3-4), 193-210.

Zajonc, R. B., & Markus, H. (1982). Affective and cognitive factors in preferences. *Journal of consumer research*, 9(2), 123-131.

Zhang, Y., Winterich, K. P., & Mittal, V. (2010). Power Distance belief and impulsive buying. *Journal of Marketing Research*, 47(5), 945-954.

Zillmann (1983), "Transfer of Excitation in Emotional Behavior," in Social Psychophysiology: A Sourcebook, John T. Cacioppo and Richard E. Petty, eds., Hillsdale, NJ: Lawrence Erlbaum.

Zillmann, D. (1971). Excitation transfer in communication-mediated aggressive behavior. *Journal of experimental social psychology*, 7(4), 419-434.

INFORMATION AND CONSENT FORM

Study Title: The roles of animated pictures in the web evaluation and online purchase process

Researcher: Mi Zhou

Researcher's Contact Information: mi.zhou@mail.concordia.ca

Faculty Supervisor: Michel Laroche, Professor of Marketing, Department of Marketing,

Faculty Supervisor's Contact Information:

Email: michel.laroche@concordia.ca

Address: John Molson School of Business, Concordia University, 1455 de Maisonneuve boul. West, Montreal, QC H3G 1M8

Source of funding for the study: CASA

You are being invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

With the rapid development of e-commerce, product pages have become more and more important. The purpose of the research is to provide insightful perspectives to business decision makers in terms of website optimization.

B. PROCEDURES

If you participate, you will be asked to read the instruction, browse a website pages and then fill out this questionnaire.

In total, participating in this study will take approximately 10-15 minutes to accomplish.

C. RISKS AND BENEFITS

There are not foreseeable risks involved in participating in this study other than those encountered in day to day life.

Benefits: This research is not intended to benefit you. However, your responses may help the researcher to learn more about how to optimize the products' pages with graphics.

D. CONFIDENTIALITY

At the end of the questionnaire, you have a choice to submit or not submit the questionnaire. It should be noticed that you cannot withdraw your data after submitting the questionnaire.

The information gathered will be anonymous. That means that it will not be possible to make a link between you and the information you provide. The researcher will protect your information into a separated mobile hard disk drive with password protection, which means only the researcher have the access to your information.

We will protect your response information by converting them into electronic data, and they will be kept into researcher's personal computer with password protection. Only during the data analysis period that supervisor and researcher will have access to the research data.

We intend to publish the results of the research. However, it will not be possible to identify you in the published results.

We will destroy the information five years after the end of the study.

F.   CONDITIONS OF PARTICIPATION

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop at any time.

As a compensatory indemnity for participating in this research, you will receive 5 dollars. If you withdraw before the end of the research, you will receive nothing.

To make sure that research money is being spent properly, auditors from Concordia or outside will have access to a coded list of participants. It will not be possible to identify you from this list.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information.

G. PARTICIPANT'S DECLARATION

Please select your choice below. Clicking on the 'Agree' button indicates that:

I have read and understood this form.

I have had the chance to ask questions and any questions have been answered.

I agree to participate in this research under the conditions described.

I am 18 years of age or older

- Agree

- Disagree

If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page 1. You may also contact their faculty supervisor.

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Questionnaire

1. **Please image that you are going to by a phone and then you start to browse the product page (Please browse this page at least 2 min)**

   Product page with animated images in English: https://v.xiumi.us/board/v5/3TRpf/156676876

   Product page with still images in English: https://v.xiumi.us/board/v5/3TRpf/156589172

   Product page with animated images in Chinese: https://v.xiumi.us/board/v5/3TRpf/151990139

   Product page with still images in Chinese: https://v.xiumi.us/board/v5/3TRpf/156679011

2. **After viewing this website, I felt:**

	-4	-3	-2	-1	0	1	2	3	4	
Annoyed	m	m	m	m	m	m	m	m	m	Pleased
Dissatisfied	m	m	m	m	m	m	m	m	m	Satisfied
Despairing	m	m	m	m	m	m	m	m	m	Hopeful
Unaroused	m	m	m	m	m	m	m	m	m	Aroused
Sleepy	m	m	m	m	m	m	m	m	m	Wide-awake

3. What is your opinion on the following statements?

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
I felt I had a lot of control over my visiting experiences at this site	m	m	m	m	m	m	m
While I was on this site, I could choose freely what I wanted to see	m	m	m	m	m	m	m
While surfing the web, I had absolutely control over what I could do on this site	m	m	m	m	m	m	m
While I was on this site, I controlled what happened in my online information searches	m	m	m	m	m	m	m

4. I think the website is

	-2	-1	0	1	2	
Unfair	m	m	m	m	m	Fair
Unbiased	m	m	m	m	m	Biased
Inaccurate	m	m	m	m	m	Accurate
Can't be trust	m	m	m	m	m	Can be trust

5. I____this site

	-2	-1	0	1	2	
dislike	m	m	m	m	m	like

6. I react ____this site

	-2	-1	0	1	2	
unfavorably	m	m	m	m	m	favorably

7. I have ____ feeling toward this site

	-2	-1	0	1	2	
negative	m	m	m	m	m	positive

8. What is your opinion on the following statements?

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
The likelihood of purchasing this product is high	m	m	m	m	m	m	m
The probability that I would consider buying the product is high	m	m	m	m	m	m	m
My willingness to buy the product is high	m	m	m	m	m	m	m
I intend to purchase this product	m	m	m	m	m	m	m

9. What is your opinion on the following statements?

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
Individuals should sacrifice self-interest for the group.	m	m	m	m	m	m	m
Individuals should stick with the group even through difficulties.	m	m	m	m	m	m	m
Group welfare is more important than individual rewards.	m	m	m	m	m	m	m
Group success is more important than individual's success.	m	m	m	m	m	m	m
Individuals should only pursue their goals after considering the welfare of the group.	m	m	m	m	m	m	m
Group loyalty should be encouraged even if individual goals suffer.	m	m	m	m	m	m	m
It's important that you pay attention to this study. Please tick 'Strong Disagree'	m	m	m	m	m	m	m

10. What is your opinion on the following statements?

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
I have the liberty to live my life as I please	m	m	m	m	m	m	m
I seek every chance I can to have fun	m	m	m	m	m	m	m
Feeling and desires related to merrymaking with friends should be gratified freely	m	m	m	m	m	m	m
There should not be any limits on individuals' enjoyment	m	m	m	m	m	m	m
Societies should value relatively free gratification of desires and feelings	m	m	m	m	m	m	m
Desires, especially with respect to sensual pleasure should not be suppressed	m	m	m	m	m	m	m
Gratification of desires should not be delayed	m	m	m	m	m	m	m
Positive feelings should not be restricted							

11. What is your opinion on the following statements?

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
People in higher positions should make most decisions without consulting people in lower positions.	m	m	m	m	m	m	m
People in higher positions should not ask the opinions of people in lower positions too frequently.	m	m	m	m	m	m	m
People in higher positions should avoid social interactions with people in lower positions.	m	m	m	m	m	m	m
People in lower positions should not disagree with decisions made by people in higher positions.	m	m	m	m	m	m	m
People in higher positions should not delegate important task to people in lower positions.	m	m	m	m	m	m	m

12. What is your opinion on the following statements?

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
It is important to have instructions spelled out in detail so that I always know what I am expected to do.	m	m	m	m	m	m	m
It is important to closely follow instructions and procedures.	m	m	m	m	m	m	m
Rules and regulations are important because they inform me as to what is expected of me.	m	m	m	m	m	m	m
Standardized work procedures are helpful.	m	m	m	m	m	m	m
Instructions for operations are important.	m	m	m	m	m	m	m

13. How closely do you associate with the following qualities?

	Does not describe me	Describes me slightly well	Describes me moderately well	Describes me very well	Describes me extremely well
Careful management of money (Thrift)	m	m	m	m	m
Going on resolutely in spite of opposition (Persistence)	m	m	m	m	m
Personal steadiness and stability	m	m	m	m	m
Long-term planning	m	m	m	m	m
Giving up today's fun for success in the future	m	m	m	m	m
Working hard for success in the future	m	m	m	m	m

14. What is your opinion on the following statements?

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
It is more important for men to have a professional carrier than it is for a woman.	m	m	m	m	m	m	m
Men usually solve problems with logical analysis, woman usually solve problems with Intuition.	m	m	m	m	m	m	m
Solving difficult problems usually requires an active, forcible approach, which is typical of men.	m	m	m	m	m	m	m
There are some jobs that a man can always do better than a woman.	m	m	m	m	m	m	m

15. What is your nationality?

Chinese

Canadian

American

Others

16. What is your gender?

Male

Female

17. What is your age?

18-25

26-33

34-41

42-49

>50

18. What's your education level?

High school

College

Bachelor

Master

Doctor