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The Cognitive Effects of Cosmetic Surgery Reality Shows – From a Priming Perspective

Shu-Yueh Lee
University of Tennessee - Knoxville

To the Graduate Council:

I am submitting herewith a dissertation written by Shu-Yueh Lee entitled "The Cognitive Effects of Cosmetic Surgery Reality Shows – From a Priming Perspective." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Communication and Information.

Catherine Luther, Major Professor

We have read this dissertation and recommend its acceptance:

Naeemah Clark, Barbara Kaye, William Seaver

Accepted for the Council:
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Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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The Cognitive Effects of Cosmetic Surgery Reality Shows – From a Priming Perspective

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Shu-Yueh Lee

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Dedication

This dissertation is dedicated to my mother, Hsueh-Yu Chen (陳雪玉), who never stops supporting and encouraging me to pursue my dreams.

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Abstract

This study applied priming theory to investigate the cognitive effects of cosmetic surgery reality shows. An experimental design was utilized to demonstrate the effects of cosmetic surgery reality shows on viewers' perceptions regarding cosmetic surgery, physically unattractive people, and the beliefs of beauty. One experimental group was exposed to cosmetic surgery reality shows and two control groups were exposed to non-cosmetic surgery reality shows. This study found strong and assimilative priming effects. After being primed with cosmetic surgery reality shows, viewers perceived greater benefits of cosmetic surgery in terms of competitiveness, confidence, appearance, happiness, and attractiveness. They also perceived lower surgical risks and perceived good-looking people as more privileged in romantic relationships and in the job market. Meanwhile, physically unattractive people were considered as being disadvantaged in social relations. Habitual makeover show viewing had no effects on the perceived benefits and risks of cosmetic surgery. It had more profound effects on perceptions of physically unattractive people and the power of beauty. Body anxiety, unexpectedly, did not moderate the effects of exposure to cosmetic surgery reality shows.

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CHAPTER 1

INTRODUCTION

Cosmetic surgery reality shows, a subgenre of reality television focusing on participants' surgical transformations, have successfully attracted audiences since 2002 (e.g. *Extreme Makeover*, *Dr. 90210*, *Miami Slices*, *I Want A Famous Face*, *The Swan*, *Plastic Surgery Before and After*, and *Plastic Surgery Beverly Hill*). The media are said to be crucial for constructing and reinforcing the norms of beauty (e.g., Blum 2003; Grogan, 1999; Wolf, 1991). Cosmetic surgery reality shows take one step further by directly informing audiences how surgery can transform their bodies into the ideal. The shows have raised concerns about their direct and potential influences on viewers' attitudes and behaviors toward their body. Meanwhile, according to the American Society of Plastic Surgeons (ASPS), cosmetic surgery increased by 48% from 2000 to 2006 (ASPS Homepage, 2008). A casual relationship between the increase of cosmetic surgery and the viewing of cosmetic surgery reality shows should not be automatically assumed. Surgeons, however, have reported that cosmetic surgery shows result in patients' unrealistic expectations to cosmetic surgery (Weston, 2008).

There are certain dominant meanings discursively conveyed by cosmetic surgery reality shows. Cosmetic surgery is portrayed as an effective and efficient means to improve patients' lives. In the first few minutes of the shows, the participants are often depicted as being unhappy and/or inferior in their social relations or professional careers due to their unattractive or imperfect bodies. The dramatic revelation scene after surgery, emphasizing the physical and emotional transformations before and after, implies that the problems and the unhappiness would be solved by surgery. The formula of cosmetic surgery reality shows is to go from tears to joy,

misery to happiness. These shows are called "faireality tales" in which the participants are the protagonists and the experts in makeover are the fairy godmothers (Bratich, 2006). They appeal and sell "the powers of transformation" (Bratich, 2006, p.8). The before-and-after narratives in the shows skillfully blend the consumptions of cosmetic goods (e.g., make-up, clothing, cosmetic surgery) and transformation, which reinforces the link between beauty and wealth (Deery, 2006). Feminism scholars criticize that cosmetic surgery reality shows objectify women's bodies and glamorize cosmetic surgery (Gallagher & Pecot-Hebert, 2007). More importantly, the shows domesticate cosmetic surgery by emphasizing its benefits and power to cure suffering; thus, viewers' responses to the meaning of cosmetic surgery might be framed the way that the shows are written (Tait, 2007).

In short, the before-and-after transformation is the backbone of cosmetic surgery reality shows. The benefits and risks of surgery are misinformed in the shows (Crockett, Pruzinsky, & Persing, 2007; Darisi, Thorne, & Iacobelli, 2005). Every case is successful but risks of the surgery are rarely mentioned (Gailey, 2007). The miseries of not being a beauty and the benefits of becoming a beauty are emphasized through the shows, which reproduce and reinforce the power of beauty. Cosmetic surgery is the magic wand that not only transforms patients from ordinary to sparkling, but also promises a better self and happier life.

The majority of studies regarding cosmetic surgery or makeover messages in the media come from critical or feminism perspectives. Through the deconstruction of narratives, these studies have concluded that the messages serve to define normality, empower consumerism, objectify bodies, or exercise the patriarchic power on women's bodies (e.g. Deery, 2006; Dixon, 2008; Franco, 2008; Heye, 2007; Jerslev, 2006; Jones, 2004; Papacharissi & Fernback, 2008;

Sender & Sullivan, 2008; Watts, 2006; Woodstock, 2001). However, there is little empirical evidence demonstrating the effects of makeover messages and cosmetic surgery reality shows. Thus, the purpose of this study is to employ experimental procedures to investigate whether makeover messages impact viewers' perceptions of cosmetic surgery and beauty. Via an experimental design, the significance of the present study, at the micro-level, is to examine the causal relations between viewing cosmetic surgery shows and the perceptions of cosmetic surgery and beauty. At the macro-level, the present study provides empirical evidence to add to the body of knowledge on how media affect people's cognitions and attitudes.

The overarching questions addressed in this study are the following: Are audiences' interpretations of cosmetic surgery and beauty affected by the shows? Do audiences believe that cosmetic surgery can create a better life? Do cosmetic surgery shows enhance audiences' beliefs of the power of beauty and reinforce the stereotypes of physical unattractive people? Media research has shown that audiences have the potential to actively negotiate the meanings or even produce opposite readings (Hall, 1991). The present study, thus, is interested in investigating whether audiences' interpretations and perceptions of cosmetic surgery and beauty correspond to the messages emphasized in the shows.

Background of Study

The Rise of Reality Television

Due to its popularity and low-cost production, reality television has occupied a major proportion of television programming in recent years. Broadcasting networks no longer see reality television as a supplementary choice for filling out daytime programming. Reality programs made up 13 percent of the prime-time programming during the 2003-2004 season

(Huff, 2006). Especially on the Fox network, 60 percent of prime-time programming in fall 2004 was reality television. Reality television is even expanding more quickly in cable networks due to their niche targets. Moreover, in 2005, Fox launched its first reality television channel devoted to "all reality, all the time" (Fox Reality Homepage, 2009).

Besides the commercial value (Deery, 2004; Hill, 2005), the rise of reality television is thought to be due to its appeals and the gratifications it offers to audiences. Realism is the essential component in defining and understanding the rise of reality television (Potter, Warren, Vaughan, Howley & Land, 1997; Cavender & Fishman, 1998). Viewers witness ordinary people's unaltered reactions to the unusual situations. Through its emphasis of unscripted, unmediated, real events, reality television attracts audiences with the voyeuristic and suspenseful pleasures (Murray & Ouellette, 2004; Nabi, Biely, Morgan, & Stitt, 2003). Audiences are promised to see through "the soul" of the participants (Patkins, 2003). The shows such as *American Idol* and *Survivor* provide the enjoyment of the interaction (Holmes, 2004). For audiences, the ordinary characters featured in the shows provide more entertainment than actors in fiction programs (Papacharissi & Mendelson, 2007). Reality television also provides audiences with the feeling of self importance and superiority since they can identify with the participants, just like themselves, and fantasize with it (Reiss & Wiltz, 2004). The above studies suggest that there are various factors contributing to the popularity of reality television. It is inaccurate to conclude the motive and gratification of reality television viewing by a single reason or a specific set of factors. Each reality subgenre serves different motives and arouses various emotions and pleasures. Researchers have to examine the various appeals and

gratifications of different subgenres to understand the popularity and enjoyment of reality television (Nabi et al., 2003).

The Subgenres of Reality Shows

Reality programming has been growing and expanding for years. A variety of subgenres have been produced to take advantage of the wave of reality shows. Based on the formats and content of programs, Quellette and Murray (2004) categorized the reality shows into six subgenres: gamedocs (e.g., *Survivor*), dating programs (e.g., *Joe Millionaire*), makeover/lifestyle (e.g., *Extreme Makeover*), docusoaps (e.g., *The Real World*), court programs (e.g., *Judge Judy*), and reality sitcoms (e.g., *The Osbournes*). Another study in the enjoyment of reality shows also grouped reality shows into six subgenres: reality dramas (*The Real World*), romance programs (e.g, *The Bachelor*), game/competition shows (e.g. *Survivor*), talent programs (e.g. *American Idol*), crime programs (e.g., *Cops*), and informational programs (e.g., *Trading Space*) (Nabi, Stitt, Halford, & Finnery, 2006). In Krakowiak, Kleck, and Tsay's (2006) study of viewers' perception of reality shows, nine subgenres were proposed: dating/romance (e.g., *The Bachelor*), makeover/lifestyle (e.g., *Extreme Makeover*), hidden camera (e.g., *Punk'd*), talent (e.g., *American Idol*), game show (e.g., *Survivor*), docusoap (e.g., *The Real World*), sitcom (e.g., *Newlyweds*), law enforcement (e.g., *Cops*), and court (e.g., *Judge Judy*).

The above studies seem to show that the growing volume of reality television has made the categorization of realty subgenres somewhat ambiguous and hardly comprehensive. For instance, Nabi's et al.'s study (2006) missed makeover/lifestyle subgenre that identified by Quellette and Murray. Meanwhile, the majority of studies in reality programming named the shows emphasizing the before-and-after transformation "makeover shows" or "makeover

television" rather than "makeover/lifestyle" shows (e.g., Hill, 2005; Heller, 2006; Heller, 2007; Weber, 2007). Since the term of makeover is sufficient to catch the emphasis and meanings of makeover shows, the present study would follow the trend that calls the shows emphasizing transformation "makeover shows" rather than "makeover/lifestyle shows."

Makeover and Cosmetic Surgery Reality Shows

Merriam-Webster Online defines makeover as "an act or instance of making over; especially a changing of a person's appearance." Reality makeover shows on television also usually feature ordinary people's before-and-after transformation. The appeal of before-and-after transformation distinguishes makeover shows from other formats of reality shows (Heller, 2006). The before-and-after transformation is so intriguing that the television industry has explored it with a variety of subjects. For instance, there are home makeovers (e.g. *Extreme Makeover: Home Edition*), body makeovers (e.g., *The Swan*), family relations makeovers (e.g., *Wife Swap*), ordinary-to-celebrity or celebrity-to-ordinary makeovers (e.g., *American Idol*, *Simple Life*), lifestyle makeovers (e.g., *Queer Eye For the Straight Guy*) (Heller, 2006). Lately, the topic of makeover has expanded from appearance and private life into people's professions, such as *Kitchen Nightmare* on Fox. As long as the before-and-after scenarios sell, the list of makeover programming will continue.

The first body makeover show can be traced back to the 1950s. *Glamour Girl*, which debuted on NBC in 1953, was the first show that celebrated the beautification of women in the before-and-after format (Cassidy, 2006). Women in *Glamour Girl* had to confess how their miseries caused them psychological pains and physical inferiorities in order to win the prize of transformation from misery to glamour. The dramatic reveal after the makeover not only

highlighted how commercial products could change their appearance but could elevate their overall life (Cassidy, 2006). This type of before-and-after storyline is at the heart of today's body makeover shows. The methods used in today's shows to do makeovers include non-intrusive tools such as fashion clothing and hair style (e.g., *What Not To Wear*), minor intrusive methods such as dieting and exercise (e.g., *The Biggest Loser*), and intrusive means such as cosmetic surgery (e.g., *Extreme Makeover*, *The Swan*). Since the focus of the present study is on the impact of makeover shows featuring cosmetic surgery, an overview of the rise of cosmetic surgery is in order.

The Rise of Cosmetic Surgery

The terms cosmetic surgery and plastic surgery sometimes are used interchangeable. Plastic surgery, however, is a boarder term that encompasses reconstructive and cosmetic surgery. According to the American Society of Plastic Surgeon (ASPS), cosmetic surgery is defined as surgery "performed to reshape normal structures of the body in order to improve the patient's appearance and self-esteem," whereas reconstructive surgery is defined as surgery "performed on abnormal structures of the body, caused by congenital defects, developmental abnormalities, trauma, infection, tumors or disease" (ASPS, 2009). Thus, cosmetic surgery refers to surgery performed solely for reasons of appearance (Haiken, 1997; ASAP, 2009).

Plastic surgery can be traced back as early as 600 B.C. in India in which a Hindu doctor reconstructed a cut nose by using a piece of cheek (Haiken, 1997; Feldman, 2004). Modern plastic surgery gained its reputation and the public's attention in World War I by restoring the appearance of wounded soldiers to help them function normally in the postwar society (Haiken, 1997). Originally, plastic surgery was a medical treatment for people who were disfigured. Many

surgeons and the public believed that plastic surgery was a medical practice to heal rather than to beautify (Haiken, 1997). In the affluence of post-World War II, however, the definition of plastic surgery has moved from reconstructive surgery to the new definition of aesthetic surgery to beautify appearance. The affluent and leisure post-war era and the youth focused culture generated a wave of cosmetic surgery (Haiken, 1997).

> For the first time, at the age of fifty, a generation of Americans were healthy, affluent, largely finished with the tasks of day-to-day family life, and ready to enjoy themselves….Beauty, in America, meant youth….The post-World War II medical and popular discussions of cosmetic surgery, in fact, suggest that thousands of middle-class women began thinking about aging at about the same time that hundreds of plastic surgeons began looking for new clients and realizing they would have to compete for those clients with the thousands of other doctors who were eyeing this growing market (Haiken, 1997, p.134).

Research in cosmetic surgery has suggested three factors that contribute to the popularity of cosmetic surgery: medical community, mass media and entertainment industry, and patients themselves (Sarwer, Magee & Crerand, 2004). First, modern medical technologies have made cosmetic surgery safer with less recovery time than before, which attracts potential clients and the profits from cosmetic surgery encourage physicians to perform cosmetic surgery. Also, unlike other medical treatments, cosmetic surgery can be advertised to potential clients through direct-to-consumer marketing, substantially increasing the growth of cosmetic surgery. Second, the media constantly present Hollywood stars and images of beauty which influence audience's beliefs of appearance. The ideal body in the media - lean, muscular, yet full-breasted - rarely occurs without the help of dieting, exercise, and cosmetic surgery procedures such as liposuction

and breast augmentation. Meanwhile, more and more people dissatisfied with their overall appearance contributes to the increase of cosmetic surgery.

To understand cosmetic surgery culture, feminist scholars suggest looking at the relationship between the medical reality of the aesthetic body and the happy psyche in our society (Gilman, 1998). In our culture, beauty and health are interchangeable, and cosmetic surgeons claims that making bodies beautiful through cosmetic surgery is a means of restoring patients' mental health (Gilman, 1998). Via altering their bodies through cosmetic surgery procedures, patients (usually women) believe their unhappiness could be diminished and their mental problems cured. Thus, when cosmetic surgery is marketed as building patients' self-esteem and eliminating patients' unhappiness, cosmetic surgery obtains its legitimation to perform invasive procedures on healthy bodies (Gilman, 1998; Haiken, 1997; Wolf, 1991).

The promise of curing patients' psyche legitimatizes the practice of performing cosmetic surgery on physically healthy patients. The cure for psyche, however, is not enough to explain the rocket-growth of cosmetic surgery. The culture of self-improvement and individualism in western society elevate the rise of cosmetic surgery (Haiken, 1997; Holliday & Taylor, 2006). Today's cosmetic surgery is framed in terms of self-improvement rather than the cure of mental distress. In this sense, cosmetic surgery has expanded its medical power from healing to a means of pursuing improvement. This transformation gives cosmetic surgery a new definition which contains little limits on the types of patients it can attract and the range of operations that can be performed. In short, post-war affluence transformed plastic surgery from reconstructive-oriented into cosmetic emphasis. Modern medical technologies, marketing strategies, media portrayals of beauty, and the culture of self-reliant all worked together to nurture cosmetic surgery culture.

Taking modern cosmetic surgery practices and cosmetic surgery reality shows together, it seems clear that the storylines of cosmetic surgery reality shows correspond to modern cosmetic surgery practice that describes cosmetic surgery as a means to pursue happiness and improvements, and at the same time contribute to the construction of the meanings of modern cosmetic surgery. Instead of analyzing the content and meanings of cosmetic surgery reality shows, the interest of this present study is to examine audience's interpretations of the messages conveyed by cosmetic surgery reality shows. This study aims to investigate audiences' perceptions of cosmetic surgery reality shows, including cosmetic surgery and patients.

Problem Statement

Research Problem

Cosmetic surgery reality shows apparently promote the benefits of cosmetic surgery. However, there is a gap in knowledge of televised cosmetic surgery messages and viewers' perceptions and interpretations of those messages. Thus, the general research question in this study is: Do viewers interpret cosmetic surgery reality shows in ways that reflect the messages of cosmetic surgery reality shows? To answer this question, the following questions are proposed: Do cosmetic surgery shows affect viewers' perceptions of or attitudes toward cosmetic surgery? Do cosmetic surgery shows reinforce viewers' stereotypes of physically unattractive people and enhance the beliefs of the power of beauty?

Research Objectives

The objective of the present study is twofold. First, it aims to fill the gap between the presumed effects of cosmetic surgery reality shows and the observed effects. Previous research has suggested that television is not only saturated with slim, young, and sexy figures, but

presents these figures in more positive ways (e.g. Fouts & Burggraf, 1999; Silverstein, Perdue, Peterson, & Kelly, 1986). The emphasis of thin ideal body on television reproduces and reinforces the norms of beauty and results in body dissatisfaction (e.g. Botta, 1999; Goodman, 2005). Moreover, today's cosmetic surgery reality programs directly inform audiences on how and what surgical procedures could do to assist them in reaching the ideal body. Of particular concern are the effects of the shows on people's cognitions, attitudes, and behaviors about cosmetic surgery and the ideal body, but little empirical research has been conducted to support the arguments. Thus, via adopting a quantitative approach and utilizing an experimental design, the present study is able to examine the casual relations between the viewing of cosmetic surgery reality shows and the perceptions of cosmetic surgery and beauty.

The present study attempts to contribute to the body of knowledge regarding media effects on body image. More importantly, instead of focusing on conventional concerns regarding body dissatisfaction, this study focuses on viewers' perceived power of beauty and cosmetic surgery. The importance of knowing viewers' beliefs of the power of beauty and cosmetic surgery is that the more the people believe in beauty and cosmetic surgery, the more likely they are to pursue beauty through surgical means.

Dissertation Organization

Chapter 1 establishes the purpose of the present study via briefly discussing the appeals of reality television and cosmetic surgery reality shows, research approach and questions. Chapter 2 reviews theoretical frameworks and makeover/cosmetic surgery messages to guide the scope and research questions and hypotheses. Chapter 3 focuses on the research design and methodology applied in the present study. Chapter 4 provides the analysis of data collected from

samples to identify the effects of cosmetic surgery shows. Chapter 5 concludes the study with a summary of the analysis and a further discussion on the relations between cosmetic surgery shows and viewers' perceptions of the shows.

CHAPTER 2

LITERATURE REVIEW

A wealth of work has demonstrated the impact of media on viewers' perceptions and evaluations of social reality (e.g., crimes, political figures, and minority) and of self (e.g., body image). Priming theory, stressing the influence of preceding stimuli on recipients' later information processing, is among the most used theoretical frameworks to study how media messages affect audiences' subsequent judgments and evaluations that they later encounter. Guided by priming theory, this study examines viewers' evaluations of cosmetic surgery and judgments of the patients after watching cosmetic surgery reality shows. In this chapter, a review of priming literature is first provided to guide the scope of and approaches to the present study. Next, the primary applications and findings of priming in media research are elaborated. Since the scope of this present study involves the use of media and the perceptions of body images, a review of the relations between the media and body images is provided followed by the review of media priming. Finally, a detailed review of makeover and cosmetic surgery shows is articulated.

Theoretical Frameworks

Priming Theory

Concepts and Determinants of Priming

Priming processes and effects are commonly studied in cognitive psychology. In cognitive and social psychology, priming refers to either the effects of preceding stimuli on perceivers' subsequent judgments of events that are later encountered (Bargh, Raymond, Pryor, & Strack, 1995; Pechmann, 2001, Roskos-Ewoldsen, Roskos-Ewoldsen, & Chrpentier, 2002) or

the processes that activate specific stored knowledge (Higgins, 1996; Sherman, 1990). Priming proposes that people usually do not engage in exhaustive information-processing for their decision-making; rather, they use the information that is easy to access or comes to their mind first to make decisions (Tversky & Kahneman, 1973). Via a priming process in which specific constructs are introduced, the constructs and related constructs could be activated and then used in later activities of judgment.

According to Higgins (1996), availability, accessibility, and the degree of fit between stimuli and stored constructs are the substantial variables that influence the likelihood of a construct being activated and used. Availability is defined as "whether or not some particular knowledge is actually stored in memory" (Higgins, 1996, p.134). Availability is necessary in making specific knowledge or constructs accessible since no knowledge or constructs can be activated or stimulated if they are not stored in memory prior to the stimuli (Higgins, 1996). Accessibility refers to "the activation potential of available knowledge" (Higgins, 1996, p134). The more accessible the knowledge is, the easier the knowledge and related knowledge would be used in information processing (Bargh, Bond, Lombardi, & Tota, 1986; Higgins, 1996). Additionally, the degree of fit between stimuli and stored constructs suggests priming effects depending on individuals and contexts. Not only do people have different stored knowledge and experiences, but interpretations of stimuli might vary in different contexts.

A large body of research in psychology and communication has suggested that recent priming is a robust process to activate specific knowledge or constructs and influence subjects' subsequent judgments or even behaviors (e.g., Bushman, 1995; Carver, Ganellen, Froming, & Chambers, 1983; Check, 1985; Hansen, & Hansen, 1988; Herr, 1986; Higgins, 1996; Srull, &

Wyer, 1979). To study recent priming effects, researchers typically utilize experimental designs to introduce stimuli to activate specific constructs. They then investigate whether these stimuli make those constructs more accessible to be used to judge a subsequent stimulus.

In a study that investigated the effects of recent priming of personality trait terms (e.g., reckless, persistent) on subjects' impression about another person, the effects of recent priming were found (Higgins, Rholes, & Jones, 1977). Also, the factor of applicability of trait terms (whether the trait terms were applicable to the stimulus person) was found to be an influential variable. The researchers assumed that exposure to the experimental trait terms would 'prime' or further activate the trait category meaning, and thus would increase the likelihood of those trait categories used in judging the stimulus person. In the experiments, the stimulus person was presented as a risk taker. The terms, such as, adventurous and self-confident were used to prime "applicable-positive condition;" reckless and stubborn were used to prime "applicable-negative condition;" obedient and neat were used to prime "nonapplicable-positive condition;" listless and sly were used to prime "nonapplicable-negative condition." The results showed that subjects' evaluation of the stimulus person was influenced by their exposure to trait terms. More subjects provided positive evaluations than negative evaluations in applicable-positive condition. Also, more subjects provided negative evaluations than positive evaluations in applicable-negative condition. There were no significant differences in both nonapplicable positive and negative conditions. The lack of significant results in nonapplicable conditions indicated that recent priming on accessibility itself was not sufficient to generate priming effects. Whether the primes were applicable to the later stimulus person or event played a critical role in priming effects.

Srull and Wyer (1979) extended Higgins et al's (1977) study using exemplars of behavioral descriptions rather than the trait terms. Memory networks and spreading activation theories suggest that it is not necessary to directly prime the terms of personality traits to increase the likelihood of those trait categories being used in subsequent judgments. Rather, priming with behavioral instances could activate the related trait schemas and further influence subjects' subsequent judgments. Two experiments that used sentence construction tasks to prime subjects' hostility-related schema (e.g., "leg break arm his") or kindness-related schema (e.g., "the hug boy kiss"), respectively, were conducted to test the above arguments. Participants in the experiments were first asked to read a paragraph about the stimulus person and then to evaluate the stimulus person. The primary hypothesis investigated whether participants' evaluations of the subsequently target person and behaviors would be influenced by the stimuli; that is, participants exposed to the hostility-prime would judge the target person more hostile than those exposed to the kindness-prime, and participants exposed to kindness-prime would report more friendly evaluations than did those exposed to the hostility-prime. Both experiments supported the hypotheses. Additionally, the effect of time interval and the intensity of priming stimuli were investigated. Priming effects decreased as the time increased; in particular, the effect of kindness-prime decreased more than hostility-prime. In both hostility- and kindness- prime, the ratings of the target person along with the priming conditions increased as the number and intensity of the priming items increased. This research indicates that the activation of one specific construct not only increases the likelihood of that construct being used to judge subsequent information, but also the magnitude of the effect increases as the frequency and

intensity increase. The more frequently and intensely the constructs are primed, the greater influence the primed constructs.

A further study conducted by Higgins, Bargh, and Lombardi (1985) investigated how recent priming and frequent priming were used in different time delays (15-second and 120-second delays) between priming stimuli and subsequent information-processing. The results showed that people tended to use the recent prime to process their subsequent information in the short delay situation but used the frequent prime as the delay between prime stimuli and subsequent judgment tasks got longer. This study suggests that the effect of recent priming is somewhat temporal but frequent priming could have a long-term influence.

The above review of literature discussed the classical priming research in terms of how priming effects occur and process. Priming effects lie in the activation of specific constructs that affect the criteria or knowledge used in later information processing. The effects of recent priming are relatively robust since a recent prime can activate specific constructs or knowledge. Research in frequent priming further suggests the effects of a repeated and intense prime could have a long-term influence. Given by the above notions, this present study will apply the phenomenon of recent priming to first, expose viewers to cosmetic surgery reality shows to activate their constructs related to the shows. Next, assess their evaluations and judgments regarding cosmetic surgery to see whether the recent priming effects exist. Additionally, the frequent priming effects of cosmetic surgery reality shows will be investigated by examining the relation between the habitual viewing of makeover shows and the perceptions of cosmetic surgery.

Assimilative or Contrastive Effect in Priming

The above studies suggest priming resulting in an assimilative effect that the direction of later judgments appears to be consistent with the content of priming stimuli. However, assimilation is not always the case in priming; a contrastive effect, an inverse judgment against the priming stimuli, is also found in priming research. For instance, the degree of the overlap between primes and subsequent information-processing and the ambiguity of priming stimuli were found to both affect the direction of priming effects (Herr, Sherman, & Fazio, 1983). Two experiments were conducted in Herr's (1983) study to examine the interactive effects of the extremity of the prime and the ambiguity of judged target on the directions of judgments. In the first experiment, four levels of animal's ferocity were used as four levels of primes: extremely ferocious (e.g. shark), moderately ferocious (e.g., wolf), moderately unferocious (e.g. cat), and extremely unferocious (e.g., dove). The level of ambiguity of judged target was operated by using unreal animals as ambiguous exemplars (e.g, jabo, lemphor) and real animals as unambiguous stimuli (e.g., wolf, cat). After the priming condition was introduced, participants were asked to rate the ferocity of target animals to measure the influence of priming on their judgments of the ferocity.

The authors proposed that assimilative effects should occur only in the condition that the judged target was ambiguous and a moderately extreme exemplar was primed. Whereas, contrastive effects were expected when extreme exemplars were introduced to judge either ambiguous or unambiguous target, and moderately extreme exemplars were introduced to judge unambiguous target since the use of prime as the reference was not necessary in judging unambiguous targets. As predicted, an assimilative effect existed only in the combination of

moderately extreme exemplars and ambiguous target. However, there were no significantly contrastive effects found in judging unambiguous targets. The authors explained this might be due to the nature of the ferocity itself. The judgment of the ferocity itself was too ambiguous to generate reliable results. Thus, the authors conducted a second experiment which replicated the procedures of the first experiment but substituted size for ferocity in primes and subsequent judgment tasks. The second experiment showed that moderately extreme exemplars could generate assimilative effects. Thus, the authors concluded that non-extreme primes were more likely to be used as a reference to process the judgment. On the other hand, extreme primes could result in contrastive effects since they acted as an extreme anchor against the judged targets.

Herr (1986) further investigated the potential behavioral effects of priming. The results of assimilative and contrastive effects were consistent with Herr et al.'s (1983) study. Besides, participants in the study acted more competitively when their prior evaluations of their game partners were more hostile, which suggested priming could generate behavioral changes as well.

Awareness of the use of prime might also play an important role in the direction of priming effects. Typical priming research is operated in the way that perceivers are unconscious about the primes so that the researchers assume that the perceivers would not make additional efforts to process the stimulus information. The above argument is based on the framework of automatic/controlled processes, which suggests that whether awareness of priming events affects the direction of priming effects (Lombardi, Higgins, & Bargh, 1987). In Lombardi's study (1987), the participants who recalled the primes introduced in the experiment within one minute were identified as being conscious of the priming event. The participants who could not recall the primes within one minute were identified as being non-conscious of the priming event. The

authors found that assimilative effects occurred when the participants were not able to recall the primes but contrastive effects emerged when the participants could recall the primes in one minute.

Other research in the relations between the awareness of the primes and the directions of priming effects also suggested that the consciousness of priming events affects the directions of priming effects (Martin, 1986; Martin & Clark, 1990). When people are unaware of priming events, an automatic information-processing is usually applied, which results in an assimilative effect. In controlled processes, people's information-processing strategies usually are so flexible that either an assimilative effect or a contrastive effect could occur. Thus, contrastive effects might occur when perceivers are aware of the prime and try to devote additional efforts to adjust their judgments or even avoid the use of the prime (Lombardi, Higgins, & Bargh, 1987; Martin, 1986). In addition, people with high need for cognition tended to show contrastive judgments and people with low need for cognition tended to form assimilative judgments toward the primes (Martin, Seta, & Crelia, 1990).

To summarize, priming proposes that a prior stimulus for a construct would increase the accessibility of that construct and related constructs in memory and thus increase the likelihood of that construct and related constructs used in the subsequent information-processing; therefore, priming has effects on people's subsequent judgments and/or behaviors. The critical determinants of priming effects include the recency and frequency of priming, the availability of priming constructs in memory, and the degree of fit between the prime and the judged target. In addition, the direction of priming effects, assimilative or contrastive, are influenced by several

factors, such as the extremity of the prime, the ambiguity of the judged target, the awareness of the priming event, and individual differences, such as the need for cognition.

The concepts of priming effects inform the present study that a prior stimulus (e.g., a media message) would affect receivers' cognitions, emotions, and even behaviors in later encountered events. In addition, research in the determinants of priming effects suggests that when conducting priming research, researchers should be aware that the degree and directions of priming effects vary in situations in terms of the nature of prime and the individual differences among the receivers. In the present study, an assimilative effect of cosmetic surgery reality shows will be examined and how the effects vary in terms of individual difference will be investigated as well.

Priming Research in the Media

Priming in the media refers to the effects of the contents of the media on people's later judgments or behaviors related to the contents (Pechmann, 2001). Priming theory has been widely applied to study the impacts of the media messages on people's views of social reality. For instance, the content of the media has been found to prime viewers' stereotypes of smokers (Pechmann & Ratneshwar, 1994), sex role (Hansen & Hansen, 1988; Davies, Zhu, & Brantley, 2007), rape myth (Check, 1985), aggressive feelings and thoughts (Anderson, 1997; Bushman, 1995; Bushman, 1998; Josephson, 1987), body dissatisfaction and anxiety (Hargreaves & Tiggemann, 2002), perceived crime and fear (Tamborinin & Bryant, 1984), and minority people (Dixon & Azocar, 2007; Monahan, J.L., Shtrulis, I., & Givens, S., B., 2005). Political news are found to influence the criteria or issues used to evaluate political candidates (Hwang, Gotlieb, Nah, & Mcleod, 2007; Kim & McCombs, 2007). In commercial products, advertisements are

found to influence consumers on what criteria are used to judge the commercial products (Yi, 1990). Since the interest of the present study is in the effects of cosmetic surgery reality shows on the perceptions of cosmetic surgery and the stereotypes of physically unattractive people, the literature review below focuses on priming research in the perceptions and stereotypes of sex-role, social reality, aggression, and body images.

Media Priming in Sex-Role Stereotypes and Social Reality

In a study that investigated the influence of sexual rock music videos, recent priming effects on viewers' sex-role schemas were found (Hansen & Hansen, 1988). In the study, Hansen and Hansen (1988) hypothesized that exposure to sexual rock music would activate viewers' sex role stereotypic schemas and influence viewers' subsequent judgments about women's interactions with men. The results showed that, in the sexual-video-prime group, the target woman was judged more sexual, more sensitive, more sympathetic, more skilled, and less threatening when the target woman reciprocated a man's sexual advances than when she did not reciprocate. On the other hand, in neutral-video prime group, the target woman was not evaluated differently whether she reciprocated or not. Exposure to sexual videos did not merely affect viewers' impression and evaluations of women but also induced shifts in the meaning of men's power. In neutral priming, a man's power was strongly and positively associated with sex and threat. In sexual priming, a man's power was not associated with threat and dishonesty so that his stereotyped behavior toward women became more acceptable. Another's study by Hansen and Hansen (1990) also supported the assertion that exposure to antisocial videos could alter viewers' judgments of antisocial acts.

Sexual media's priming effects were found to be mediated by gender and viewing habits (Ward, 2002). In Ward's (2002) study, participants were randomly assigned to watch one of three video clips edited from television programs that contained sexual stereotype content, neutral content, or nonsexual content. Correlation analysis found that viewing habit and exposure to sexual stereotype content were associated with viewers' endorsement of sexual stereotypes. Greater priming effects were found among women. Female participants in sexual stereotype priming condition reported a stronger endorsement of sexual stereotypes than women in neutral or nonsexual priming condition. Also, among female participants, heavy sitcom viewers offered stronger endorsement of sexual stereotypes than light sitcom viewers. This study demonstrated that the sexual stereotypes in the media in general can affect viewers' perceptions of sex roles. In particular, recent viewing activity and frequent viewing habits can both play a role in viewers' perceptions of sex roles.

The effects of viewing habits on the magnitude of priming effects were supported by another study that examined the relation between television viewing and the perceived social reality (Shrum, Wyer, & O'Guinn, 1998). The researchers assumed that the effects of television on viewers' perceptions of social reality resulted from viewers' failure to discount the television-based exemplars in forming their beliefs about social reality. Previous research has suggested that people usually fail or are not motivated to exhaustively search for relevant information to form a judgment; thus they rely on available shortcuts or heuristic devices. This suggests that people usually form their judgment simply based on the information which first comes to mind. The unanswered question is why viewers apply television exemplars to form their judgments despite television programs have nonveridical contents. Several factors have been proposed to

explain this phenomenon. First, viewers are not motivated to retrieve reliable sources since the judgment is difficult and/or low-risk (e.g., the estimates of crime, marital discord). Second, viewers are unable to determine the source they retrieve (e.g, not aware of using television instances). Taking into considerations these factors, the researchers argued that television viewing could be consider a "natural priming," which made exemplars easy to access and more accessible in memory for heavy viewers than for light viewers.

An experiment was conducted by Shrum et al. (1998) to examine whether discounting television as the source of estimation affects viewers' estimates of social reality. Three groups were included in the study, no-priming, source-priming, relation-priming. In the no-priming condition, viewers were asked to give their estimates of social reality, such as crime and particular occupations, and then provided their television viewing hours and habits. Source-priming condition asked viewers to provide their viewing hours and habits in advance and then give their estimates of social reality. In the relation-priming condition, participants were given a warning message which reminded participants that people often formed their judgments based on television information, and in most cases, the television information was not accurate. The researchers hypothesized that by providing a source- or relation- priming condition, both heavy and light viewers would be aware of the nonveridical information provided from television and in turn search for other reliable information to form their judgments. On the other hand, in the no-priming condition, participants, especially for heavy viewers, would use television instances to form their judgments since television information provided a heuristic which was easily accessible. The findings were consistent with the hypotheses. Heavy viewers' perceptions of social reality in terms of crime and occupation were more consistent with the content of

television programs. Particularly, in the no-priming, the estimates of crime and occupation were significantly increased as the viewing time increased, and in both source- and relation- prime, the estimates of crime and occupations were not significantly different in viewing hours. The researchers argued that no-priming condition represented typical television effects on viewers' perception of social reality. Heavy viewers were more likely to use televised exemplars to form their judgments or impression of social reality.

Overall, television influences viewers' perceptions of social reality and sex roles via acting as a source or activating related schemas. Stronger priming effects obtained from heavy viewers indicate the combination of recent and chronic accessibility results in more profound impacts (Higgins, 1996; Shrum, 1998). Repeated or frequent activation of a construct from social interaction and/or media could result in a lower threshold of activation, making a construct chronically accessible and more persistent (Bushman, 1998; Hansen & Hansen, 1988; Higgins, King, & Mavin, 1982). The above notions once again inform the present study that both short-term and long-term exposure to cosmetic surgery reality shows might influence viewers' perceptions regarding cosmetic surgery, body images, beauty, and patients.

Media Priming in Aggression

Priming effects are found in violent media messages. For instance, violent media could enhance viewers' accessibility of aggressive thoughts (Bushman, 1998). In Bushman's (1998) study, two experiments were conducted to examine whether a recent prime of violent media made aggressive constructs more accessible. In experiment 1, after either exposure to a violent video or nonviolent video, participants completed a word association task to assess the accessibility of aggressive thoughts. The results showed that participants who saw the violent

video listed a greater number of aggressive words than did those who saw the nonviolent video. In experiment 2, the researcher investigated the above hypothesis via measuring viewers' reaction times to the aggressive words. As expected, participants in the violent-priming condition demonstrated shorter reaction times to aggressive words than did those in the nonviolent-priming condition. Both experiments suggested that a recent prime of violent media messages increased the accessibility of aggressive thoughts and associations.

Another direction of media priming research addresses the influence of individual factors on the magnitude and direction of priming effects. For instance, Bushman (1995) examined the moderating role of personality trait in priming. A series of experiments were conducted to examine first, whether personality trait affected viewers' choices of the type of movies (violent movie or non-violent). Second, whether the effects (including emotion and behavior) of violent media varied in individuals with the level of aggressive trait. The first experiment showed that individuals with high trait aggressiveness tended to favor violent films than did the individuals with low trait aggressiveness. Also, trait aggressiveness was positively associated with habitual exposure to violent drama. Individuals with high trait aggressiveness reported more consumption of violent drama. Two further experiments were conducted in Bushman's (1995) study to test the moderating role of trait aggressiveness on affective and behavioral effects. Trait aggressiveness was found to moderate priming stimuli's affective and behavioral outcomes. Subjects exposed to a violent film felt angrier than did those who were in the nonviolent film condition. For measuring the behavioral effect, subjects were asked to compete with one another in a reaction time task followed by priming conditions. Subjects exposed to a violent film gave their opponents significantly louder blasts of noise than did those exposed to a nonviolent film.

The mediating role of individual differences in the relations between the viewing of television violence and aggression also were supported by other studies. For instance, instead of investigating traditional aggressive traits, Scharrer (2001) investigated a more subtle trait, hypermasculinity, in stimulating male viewers' aggressive thoughts. The results showed that the increase of aggressive thoughts depended on viewers' hypermasculiny trait. Individuals with high hypermasculinity scores tended to have greater increases of their aggressive thoughts than did those with low- hypermasculinity.

In addition, in a study that investigated the influence of modeling behaviors on subjects' impression forming of an ambiguous target person supported that a modeling behavior could result in priming effects (Carver, Ganellen, Froming, & Chambers, 1983). According to Carver et al. (1983), the influences of a modeling behavior might not exist merely because of the disinhibiting or inhibiting mechanisms suggested by observational learning theories (Bandura, 1994). The researchers stated that modeling behaviors "are often attributable to increased accessibility in memory of information specifying the behavioral acts, as a function of watching the model" (Carver et al. 1983, p.404). Two experiments were conducted to investigate how exposure to a filmed model who either engaged in aggressive or nonaggressive behavior influenced subjects' subsequent judgments on the stimulus person. The researchers also tested whether priming directly influenced subjects' overt behavior. The results were consistent with the hypotheses. Subjects exposed to the aggressive film perceived more hostile feelings from the stimulus person than did those exposed to a nonaggressive film. The behavioral effect of priming was investigated by a teaching task. Subjects were asked to teach a concept to their co-subjects and delivered an electric shock ranging in degree from 1 to 10 if their co-subjects failed to

answer correctly. The result showed that subjects exposed to the aggressive film delivered greater shock intensity than did those in the control group. Priming subjects with a modeling behavior affected both subjects' cognitive perceptions of the subsequent stimuli and subjects' overt behaviors. Also, from the perspective of media research, this study suggested an alternative approach from learning theories to study the mechanism process in which the televised modeling influenced perceivers' cognitions and behaviors.

Consistent with Caver et al.'s (1983) arguments of the cognitive mechanism of televised modeling, Berkowitz (1984) emphasizes media effects in terms of priming and spreading activations on viewers' anti- and prosocial thoughts, emotions, and overt behaviors. Suggested by Berkowitz's and other scholars' research in memory and information processing, Berkowitz (1984) argues that memory should be considered as a collection of networks. Each network is consisted of several nodes which represent the elements of thoughts, emotions, behaviors, etc., and nodes are interconnected through associative pathways. By activating (priming) a thought, not only is the thought more accessible, but also the interrelated thoughts, emotions, and behaviors would be generated (spreading activation). Thus, Berkowitz (1984) stresses that the portrayals of violent media primed viewers' aggressive thoughts and emotions, and resulted in related overt behaviors. Other factors considered to influence the magnitude of priming effects include viewers' interpretation of the meaning of the violent message (stimulus) and observed aggression, the reality of the observed incident, the nature of available target and viewers' identification and imagination (Berkowitz, 1984). Since social learning theories are not applicable to explain the transient effects of media modeling and true imitation of a modeling behavior is fairly rare, Berkowitz (1984)'s analysis articulates that priming effects are able to

explain the transient effects of media message and the activation of related constructs and behaviors.

The above studies demonstrate a direct and positive causal relation between media primes and the subsequent information processing or behaviors. However, as noted previously, the direction of priming effects is not always congruent with the primed messages. Inverse responses to the messages suggested the variations in priming effects. Some studies even demonstrate no changes in perceptions, cognitions, attitudes, or behaviors. For instance, in the Greenberg, Linsangan, and Soderman (1993) study, adolescents were exposed to the television programs containing either the scenes of prostitution and married intercourse or the scenes of homosexuality and unmarried intercourse. The results showed no difference in the beliefs about prostitution (e.g., Most prostitutes are young), married intercourse (e.g., Only married people should have sex.), homosexuality (e.g., Homosexuality is always wrong.), or unmarried intercourse (e.g., Today, most teenagers have sex before they are married.).

Research in the variations of priming effects in terms of the magnitude and directions suggested two factors, individual difference and the nature of media content, contribute to the mixed results (Taylor, 2005). In the Taylor (2005) study, individual's sex attitudes and beliefs, perceived realism to the primed content (television program) were measured as mediators. Visual-implied or verbal-emphasized sexual scenes were manipulated to investigate whether the type of media - visual or verbal - played a role in the perceptions of sexual activity. Four conditions were operated: no-viewing, neutral television content, sexual scenes emphasized by verbal discussion, sexual scenes implied by visual portrayals. The results found no main effect in sexual media priming; only people who perceived television to be relatively realistic and who

were exposed to sexual television exhibited significant changes of sexual attitudes and the beliefs about women's sexual activity. The results suggest that media exposure all by itself is not sufficient to generate a change on attitudes or belief.

In short, the findings in the relations between the media and aggression demonstrate a similar pattern to sexual media. In general, violent media could activate viewers' aggressive-related thoughts and even behaviors. However, the magnitude of the effects seems to depend on the nature of the media content and individual differences. Given by the above notions, the present study will investigate how individual differences, such as demographics and attitudes to body, mediate the effects of the viewing of cosmetic surgery reality shows.

Media, Priming, and Body Image

Body image is a hot topic in media research. Body image is defined as "an internalized view of one's appearance that drives behavior and influences information processing" (Altabe & Thompson, 1996). Body image is conceptualized as a mental representation of the body, which encompasses affective (e.g., anxiety), attitudinal (e.g. the thoughts and cognitions of thin ideal), and behavioral (e.g., dieting) components, that is elastic (i.e., subject to change under different contexts) (Botta, 1999; Myers & Biocca, 1992). Previous research in using qualitative approaches focuses on how the media present the norms of beauty and sex roles to construct, reproduce, and reinforce the ideal body image (e.g., Blood, 2005; Coleman, 2008, Goodman & Walsh-Childers, 2004; Gough-Yates, 2003; Markula, 2001; Oliver, 1999; Orbach, 1998; Sinclair & Wilken, 2007, etc). For instance, in Goodman and Walsh-Childers's (2004) study for how college women negotiate the media's ideal breast image, the researchers conclude that media images of ideal body directly and indirectly influence women's breast satisfaction. The media

shape women's self images because the mediated ideal image serves as a reference for how to evaluate their own bodies. Blood (2005) also criticizes that women's magazines contribute to what counts as common sense about women's bodies. She says that it seems 'normal' that women should have hairless legs and flat stomachs – although all women have naturally hairy legs and most do not have flat stomachs.

Quantitative research in body image and media primarily examines the relations between media use/exposure and the cognitions, attitudes, and/or behaviors about body (e.g. Aubrey, 2007; Bissell & Zhou, 2004; Botta, 1999; Eggermont, Beullens & van den Bulck, 2005; Harrison, 2000, 2003; Goodman, 2005; Harrison, Taylor & Marske, 2006; Lavine, Sweeney, & Wagner, 1999; Myers & Biocca, 1992; Park, 2005; Sands & Wardle, 2003; Thompson & Heinberg, 1999; Tiggemann & Pickering, 1996; Turner, Hamilton, Jacobs, Angood, & Dwyer, 1997, etc.). The media are saturated with the thin ideal body image that might cause viewers' body dissatisfaction or pressure to be the ideal (Silverstein, Perdue, Peterson, & Kelly, 1986).

For instance, the media were found to be the most powerful sources of pressure for female college students to be slim (Irving, 1990). Both women and men were found to report higher degree of body dissatisfaction after exposure to television ads portraying women as sex objects (Lavine et al., 1999). In Harrison's study (2003), college students' television viewing was not only associated with their views of the ideal female body, but was associated with their approval of women's use of surgical procedures to alter their bodies. Media effects on body dissatisfaction also were found in children and teenagers. For adolescent girls, the viewing of music videos which were filled with firm, slim, and sexy features predicted the drive to be thin (Tiggemann and Pickering, 1996). The viewing of music videos was associated with teenagers'

body dissatisfaction (Borzekowki, Robinson, & Killen, 2000). Television viewing increased the likelihood of eating disorders for both girls and boys and increased the tendency among boys to stereotype a fat girl target as well (Harrison, 2000).

In short, research has suggested that the media affect people's cognitions, attitudes, and even behaviors about their bodies. A majority of quantitative studies in body image were guided by Festinger's (1954) social comparisons theory and employed experimental procedures to examine the casual relations between media exposure and negative impacts, such as body dissatisfaction, low self-esteem, self-dissatisfaction, and eating disorders. Social comparisons suggest that one often looks at others to evaluate ourselves. When one looks at the ideal, attractive images portrayed in the media, an upward comparison occurs through which the person feels inferior about him/herself and generates negative self-evaluations. However, in most cases, the paradigms of priming and social comparisons in body image scholarship are not excluded from each other since the processes of comparisons emerge while the media primes are introduced and the appearance-related schemas are activated (Altabe & Thompson, 1996; Häfner, 2004; Heinberg & Thompson, 1995). In this sense, priming could be considered as an antecedent which generates a comparison process and results in the changes of self-evaluations. A large amount of research has skipped the discussion of the activation of appearance schemas and directly explains the phenomena of thin media images under the theoretical frameworks of social comparisons. Recently, some studies have taken a step back to investigate whether the ideal images in the media activate appearance-related schemas and subsequently result in comparisons.

An experiment conducted by Hargreaves and Tiggemann (2002) suggested that attractive images in television commercials were able to activate appearance-schemas and result in

negative consequences. In their study, appearance-schemas were conceptualized as a mediator that would be activated by appearance-related commercials and in turn resulted in negative mood change and body dissatisfaction. Appearance-related schemas were measured by two tasks: word-stem completions that each sentence could be completed with an appearance-related word or nonappearance-related word, and recall tasks that participants were asked to recall the advertised products that they viewed. The evidence to the activation of appearance-related schemas was found in the appearance priming. The teenagers who watched appearance-related commercials completed word-stems with greater number of appearance-related words than did those in the neutral priming group, as well as better recall of advertised products. In addition, the regression test found that body dissatisfaction was partialed out by appearance-related schemas which suggested that viewing appearance-related commercials not only activated appearance-related schemas, but also subsequently caused body dissatisfaction.

The priming effects of thin ideal images are not limited in the body dissatisfaction. Thin ideal images used in commercials also could connect the commercial product with the thin ideal images. For instance, in female tobacco advertisements, sexy models often are used as the representation of smoking women and to imply the link between smoking and the ideal body, which constructs viewers' cognition that links smoking and weight control (Mckee, Nhean, Hinson, & Mase, 2006). Guided by priming theory, Mckee et al. (2006) hypothesized that attractive models could serve as an implicit prime to activate the associations between thin ideal and cigarettes through which women believe that smoking helps weight control. Forty female smokers were exposed to 30 slides depicting ideal body images and participants' level of eating restraint was assessed as well. The results showed that after exposure to the attractive models,

restrained eaters tended to believe that smoking could help weight control. Consistent with the majority of previous studies in media effect, this study found the effects of ideal body images are mediated by individual differences. More importantly, this study suggests that ideal body images would not only activate appearance schemas that in turn result in a comparison between self and the priming images, but they could generate associated schemas, such as smoking and weight control, which influence viewers' evaluations or judgments of subsequent information.

The above study also suggested that the effects of ideal images vary in terms of individual difference. In a study that examined how thin media affect different women in terms of their level of body satisfaction, the results showed that the original body attitude was a crucial factor determining the effects of thin ideal media (Johnasson, Lundh, & Andersson, 2005). The researchers measured the time participants respond to self-esteem relevant threat words (e.g., fired, hopeless) to assess the influence of thing ideal images. Women in high body dissatisfaction were hypothesized to respond slower to self-esteem relevant threat words after being primed with thin ideal images. Additionally, self-esteem was measured twice: before priming and after priming. A significant interaction effect was found between body dissatisfaction and thin ideal priming. The results showed that low body dissatisfied women reported higher self-esteem after viewing thin ideal images. Women in high body dissatisfaction responded slower to the self-esteem relevant words than low body dissatisfied women after exposure to thin ideal images. However, the results only supported the assertion that high body dissatisfied women perceived stronger effects than low body dissatisfied women. The analysis among high body dissatisfied women found no difference between thin ideal priming and neutral priming. Thus, the

assumption that high body dissatisfied women were the most vulnerable to thin ideal images was not supported.

Another study conducted by Birkeland, Thompson, Herbozo, Roehring, Cafri, and van den Berg (2005) examined both priming and social comparisons theories to see which theory could better explain the negative effects of thin ideal images. Two types of priming stimuli, person and product, were manipulated to examine the underlying mechanism of body dissatisfaction generated from media messages. The authors argued that if priming effect was dominant, an appearance-related prime all by itself should be sufficient to generate body dissatisfaction. Thus, either an attractive model (person prime) or appearance-related product (product prime) results in body dissatisfaction or mood changes could be expected. On the other hand, if body dissatisfaction or mood changes exist merely in person prime condition, this suggests that body dissatisfaction or mood changes involve not only a priming stimulus to activate the primed schema but also a comparison process to generate the negative emotions. An experiment was conducted and four prime conditions were operated: an attractive model with an appearance product, the attractive model only, the appearance product only, and an attractive model with a neutral product. The results showed that only the individuals in attractive model condition demonstrated mood changes and body dissatisfaction. Neither product prime nor the interaction between person prime and product prime had effects. This study suggests that the mechanism of body dissatisfaction after exposure to ideal body images involves an upward comparison process. However, it is not clear whether an appearance-related product prime could activate appearance schemas since the activation of appearance schemas by a beauty product prime in this study is assumed rather than measured. Despite the fact that priming theory

suggests that an implicit prime also could activate the related constructs (Srull and Wyer, 1979), whether the participants' appearance schema is activated by the beauty product used in this study remains unknown. If the beauty product in this study did not activate appearance-related schemas, the subsequent priming effect would hardly emerge. Thus, this study merely provides evidence to suggest that the negative effects resulting from attractive body images might be due to upward comparisons. Whether the priming effect all by itself is sufficient to explain the negative effects of ideal body images remains unclear.

The above studies demonstrate mixed results in body image research. A majority of research links the relations between thin media exposure and negative self-evaluations; some studies, however, did not find evidence for the activation of priming, and some studies even found an elevation of self-evaluation after exposure to thin ideal images (e.g., Häfner, 2004). The perceived similarities between primes and perceivers' selves were proposed to affect the direction of comparison (Häfner, 2004). When the priming models are portrayed in a way that viewers perceived similarities with themselves, viewers would compare themselves with the priming models and thus feel inferior (Häfner, 2004).

In addition, the similarity between priming models and viewers and data collection methods would influence the direction of priming effects (Smeesters & Mandel, 2006). The roles of extremity of thin (or heavy) media images and the measured methods (free response or rating scale) were both examined in Smeesters and Mandel's (2006) study. A free-response measure was considered as a more neutral method that did not provide a reference-point to lead the comparisons; thus a positive self-evaluation was possible. In addition, the authors assumed that moderately thin/heavy models were more likely to be considered as "possible selves" and in turn

felt positive about self, whereas extremely thin/heavy models might result in negative effects. The results showed that for free-response groups, participants exposed to moderately thin models demonstrated higher body esteem than those exposed to moderately heavy models, and participants exposed to extremely thin ideal models exhibited lower body esteem than those exposed to extremely heavy models. In scale measurement, participants exposed to either moderately or extremely thin models demonstrated lower body esteem than those exposed to heavy models.

Smeesters and Mandel (2006) further conducted an experiment to replicate the first experiment and investigate how and what thin ideal images affect body esteem. The results were consistent with previous findings. Participants exposed to moderately thin models responded faster to thinness words than neutral or heaviness words, which indicated moderately thin models were more effective to activate thin related schemas. Smeesters and Mandel's (2006) research is congruent with the emphasis of Higgins (1996) and Herr et al. (1983) reports that the applicability of priming stimuli and the measured tasks both influence the direction and magnitude of priming effects.

A majority of studies suggest the correlations between thin media and negative self-evaluations. However, by far it seems premature to conclude an equation describing the direction and magnitude of priming effects on body image. Perhaps, the argument that could be proposed is that negative self-evaluations occur when viewers compare themselves with the thin ideal media and thus feel inferior and/or when viewers' appearance related schemas are activated and in turn generates upward comparisons which results in negative self-evaluations.

The above literature in television priming effects on sex-role, social reality, violent media, and body image informs the present study that television contents could activate viewers' specific constructs and influence viewers' cognitions or judgments. In addition, individual differences in terms of viewing habits and personality affect the degree of priming effects. Thus, the present study will not only examine the assimilative priming effects which are suggested by the concepts of priming theory, but individual differences in terms of their television viewing habits, attitudes toward appearance, and demographics.

Makeover Television

Research in Makeover Programs

In recent years, the rapid growth of reality makeover programming has resulted in a major effort to understand its development and impact. A majority of research begins with critical feminist perspectives to analyze the ideologies and meanings embedded in makeover programs. Another popular direction of research departs from historical and cultural stands to decompose the intertwined relations between culture and makeover television and how makeover television exploits and at the same time contributes to the historically rooted culture and myths, such as 'can-do' optimism and the fantasy of 'rebirth' rooted in American culture, which Heller (2006) called 'American makeover mythos'.

For instance, the narratives used in *Plastic Surgery: Before and After* appeared to echo the America's founding myths that one should abandon his or her old life and encompass a new self (Crawley, 2006). For Crawley, cosmetic surgery shows like *Plastic Surgery: Before and After*, are not only rooted in a fantasy of rebirth popular from the mid-nineteenth century, but add a new myth that body is 'a site of psychological change'(p.52). An unhappy psyche is reversible

through a change of body. In her analysis of the narratives in *Plastic Surgery: Before and After*, the verbs used in the show construct cosmetic surgery as an active agent rather than simply a medical practice, for instance, "it reverses the signs of aging" or "it repairs the scars of trauma" (p.57), Thus, cosmetic surgery "becomes a healer, a worker of miracles" (p.57). Also, by contrasting the painful psyche or imperfect body before surgery to the celebration of after-surgery, cosmetic surgery is constructed as a means to release from the past and turn to a better future. Thus, the presentation of cosmetic surgery shows exploits the fantasy of rebirth. Every patient after surgery is reborn into a new 'American Adam' who would be free from personal history (Crawley, 2006).

In a study focusing on the meanings and representations in *Extreme Makeover* and *The Swan*, the author argues that beauty is not only linked with happiness and wealth, but the shows suggest that they could be attained through the consumption of surgery and commercial goods (Deery, 2006). In cosmetic surgery shows, appearance is the central component and is portrayed as a crucial factor that influences how people interact with themselves and others. However, it is insufficient if the criticisms only emphasize the misrepresentation of the importance of appearance portrayed in the shows, because in reality, looks do matter and hold capital privileges (Deery, 2006). For Deery (2006), the issue that should be paid closer attention is how cosmetic surgery shows link beauty and wealth. Every transformation is completed and succeeds through the consumption of surgeries and commercial goods. The pressure the shows put on women is not only the pursuit of beauty, but consuming to become a beauty (Deery, 2006).

Another interesting study reveals the similarities and dissimilarities between the Miss America pageant and cosmetic surgery reality shows, including the performances of femininity,

empowerment of women, and the political and cultural conditions in which those shows are produced and accepted by the public (Banet-Weiser & Portwood-Stacer, 2006). From Miss America to cosmetic surgery reality shows, one could see the changing role of the media in the normalization of femininity. With the decline ratings of Miss America, for Banet-Weiser and Portwood-Stacer, cosmetic surgery reality shows undertake the role of Miss America in defining the performance of gender and women's liberal rights in a contemporary way in which post-feminism emphasizes individualism, personal choice and individual equality. With its universal, cookie-cut beauty and its traditional arguments of women rights, Miss America has failed to connect its identity with modern, diverse audiences. Instead, cosmetic surgery reality shows successfully connect audiences by literally presenting ordinary women's transformations under the articulation of personal choice. Unlike Miss America, viewers of cosmetic surgery reality shows witness the process of transformation and the exercise of 'girl's power'. With the celebration of media visibility and the pleasure of consumption in post-feminism, the emergence of cosmetic surgery reality shows is consistent with contemporary lieu. More importantly, the shows normalize cosmetic surgery by featuring "ordinary people" and fantasize cosmetic surgery by presenting the always successful results in which provide no room to put doubts on the effects of cosmetic surgery (Banet-Weiser & Portwood-Stacer emphasizes, 2006).

Poster (2007) employs cultural studies to conceptualize how cosmetic surgery shows resonate with Baudrillard's hyperreal and Foucault's care of self and beyond. The events in reality television are carefully planned and edited so that the critics often fall into pseudo-reality. However, Poster (2007) argues that the critics should go beyond the point of realism or fabrication since reality television, such as cosmetic surgery shows, has brought reality into

Baudrillard's version of hyperreality in which the reality is stimulated by the media and happens to real people. In this sense, the effects of cosmetic surgery reality shows do not vanish after the shows go off the air. Also, a central ideology, care of self, is reflected in that cosmetic surgery is validated and legitimized as a new mode of care of self for both participants and audiences.

Cosmetic surgery reality shows are also criticized in the light of the construction and pathologization of women's bodies and subjectivities (Gailey, 2007). Women's subjectivities have been narrowed into a work of "a collection of formulaic body parts" (Gailey, 2007, p.110). Women are urged to change their imperfect body parts to liberate themselves. For Gailey (2007), cosmetic surgery reality programming is a member in "female socialization television" which provides how-to manual for 'doing gender'. Cosmetic surgery reality shows not only explicitly construct a certain type of body for the young women, but also the so-called 'mommy makeover' pathologizes a mother's body after childbirth. A mother should be responsible for her body and 'recover' from childbirth to be 'normal'. Additionally, a woman's surgical decision is defined as a brave step to start taking care of herself and controlling her own life. Thus, the humiliating confession and display of an imperfect body in the shows becomes a necessary step towards salvation. More importantly, with the neglect of risks, cosmetic surgery shows misinform the benefits and risks of cosmetic surgery. She says,

> Presenting the surgical invasion of healthy bodies within the framework of female courage, self-nurturance, sacrifice, and social salvation, these shows restore the humiliated to self-confidence, the lonely and rejected to emotional and sexual connection, and the erstwhile house-bound to active lives replete with mountain bikes and jet skis – all in less than an hour and with minimal attention to the pain or complications of major surgery (Gailey, 2007, p.115).

Cosmetic surgery reality shows have spread out to other countries and other cultures. A study has revealed the similarities and dissimilarities of the representations of gender, class, and cultural identity in different versions of *Extreme Makeover* aired in the US, UK, and Dutch (Franco, 2008). The author suggests that cultural differences among America, UK, Dutch, and France could be recognized from the presentation elements of the shows. Compared with the UK version, participants' (women) desires to be better are emphasized in America's *Extreme Makeover*, which reflects the emphasis of American culture on self-improvement. Also, surgical and recovery scenes are minimized which demonstrates the admiration and glamorization of aesthetics in American cultures. On the other hand, Dutch and Flemish cosmetic surgery shows emphasize voyeuristic pleasures by having more nudity and emotional scenes. Despite the fact that the presentation elements are proportioned slightly differently among American and European versions, the gender inequality and class representations remain similar. The ideology of gender inequality is embedded in the shows throughout the different narratives articulated for men's and women's makeover stories and the way they are presented. For women, reaching the norms of beauty to be feminine is necessary to qualify for a happy life. Thus, a woman who has no cleavage and lacks smooth skin and a flat stomach needs to be 'transformed' to be qualified for a better life. On the other hand, the narratives for men's surgery are not only less dramatic, but also function to help men return to their original selves. Thus, a man's makeover helps him to finally look the way he is supposed to look; a woman's makeover transforms her so that she can get rid of the 'duck in the pond' destiny. The author argues that the narratives of 'repairing men, transforming women' once again represent the structural inequality in gender. Women's original qualifications are not sufficient to obtain a better life and cosmetic surgery could rescue

them from deficiency. Men are merely masked by their bad habits or tastes so that cosmetic surgery is the tool to polish and return their true selves.

It seems apparent that cosmetic surgery reality shows present cosmetic surgery and patients in a certain way in which the ideologies of gender, class, and consumerism are reinforced. In makeover stories, women on their own are a problem and in order to remedy and enhance social and economic power, women have to be as objects of desire. In the formula of makeover stories, cosmetic surgery reality shows link the consumptions of makeover goods with well-being and class in which women are required to objectify themselves in order to be subjects again (Fraser, 2007). The formula of the shows is:

> 1) the presentation of the self as a 'problem' in need of external expertise; 2) the idea that transformation will improve a person's life and life chances; 3) the democratization of beauty: everyone has the ability to transcend their appearance; 4) the aim being to become more attractive to the opposite sex – heteronormativity; 5) consumption/self-commodification; 6) passing/class-transcendence and celebrity emulation or identification; 7) that the self is malleable, plastic. (Fraser, 2007, p.178)

Cosmetic surgery reality shows also are criticized in the light of the objectification of women's bodies and the normalization of cosmetic surgery. In the operation rooms presented in the shows, women's body parts are represented just like a piece of meat that is subject to a re-work (Gallagher & Pecot-Hebert, 2007). The work of cutting, adding, reshaping, and repositioning is the gateway to success. Thus, cosmetic surgery reality shows problematically imply that a woman's new look will solve all of her problems (Gallagher & Pecot-Hebert, 2007). Cosmetic surgery reality shows not only domesticate plastic surgery, but also justify it (Tait, 2007). In cosmetic surgery shows, the patients are presented as kind and self-sacrificing people

but unfairly suffering due to their "ugliness". Thus, they deserve a surgery to be better-looking and happier.

In short, from feminist perspectives, the power of cosmetic surgery shows is to normalize and glorify cosmetic surgery, which reinforce the norms of beauty and objectify women's bodies. Through the deconstruction of the narratives and presentation strategies, the scholars have recognized how cosmetic surgery reality shows promote the norms of beauty and cosmetic surgery and incorporate consumer culture and societal beliefs. Beauty is a means to have a better life and cosmetic surgery is the means to be a beauty. The arguments provided by critical studies inform the present study that the dominant meanings and ideology embedded in cosmetic surgery reality shows might affect viewers cognitions and beliefs about beauty. Thus, the present study will examine the relation between the viewing of cosmetic surgery reality shows and the beliefs toward the power of beauty.

Critical studies in cosmetic surgery reality shows have provided insights and provoked further consideration of the impact of cosmetic surgery reality shows and how they work in our society. With the popularity of cosmetic surgery shows, gradually the search for empirical evidence to understand the effects of cosmetic surgery shows has emerged.

A study investigating the factors that contribute to plastic surgery patients' decision-making revealed that cosmetic surgery reality shows played a role in affecting patients' decision (Darisi, Thorne, & Iacobelli's, 2005). In addition, the motivations to have surgery reflected the narratives portrayed in the cosmetic surgery reality shows (Darisi et al., 2005). In the study, participants expected to gain improvements after surgery, including being more attractive, happier, and having a better life. They also legitimated cosmetic surgery as a means to have

changes. Participants expressed the beliefs that cosmetic surgery was not for vanity but to enhance their life quality. They also stated that their decisions were influenced by their family, friends, and the successful results they saw on television.

Another research focused on first-time cosmetic surgery patients also found relations between the viewing of cosmetic surgery reality shows and the desire for cosmetic surgery (Crockett, Pruzinsky, & Persing, 2006). Forty two first-time cosmetic surgery seekers were surveyed in the Yale Plastic Surgery Clinic. The researchers assessed participants' viewing habit of cosmetic surgery reality shows, self-evaluated knowledge of plastic surgery, perceived realism of cosmetic surgery reality shows, the degree to which cosmetic surgery shows affected the decision of pursuing cosmetic surgery, and body disturbance. Majority of participants (88%) reported watching cosmetic surgery reality shows and of them, 57% was high-intense viewers. Four out five first-time cosmetic surgery seekers reported that cosmetic surgery shows influence their decision on seeking cosmetic surgery. High-intense viewers tended to believe that cosmetic surgery reality shows are similar to real life. They felt more knowledgeable than low-intense viewers, including the knowledge of benefits, risks, length of procedures, and recover time. However, the amount of exposure seemed to have no influence on body disturbance. Despite the pooled samples demonstrated higher level of body disturbance than average Americans, high-intense viewers in this study did not have higher level of body disturbance than low-intense viewers. This study demonstrated the effects of cosmetic surgery reality shows on people who are interested in cosmetic surgery. However, the influence of cosmetic surgery reality shows on the average viewers is not attainable.

Another survey containing 662 college students in Los Angeles, California and Buffalo, New York revealed that viewers were affected by cosmetic surgery reality shows in terms of beautification, body image, and anxiety (Albright, 2007). The study showed that 87% of respondents agreed that the patients in the shows after surgery were more beautiful than before surgery. Of those, female respondents (70%) were more likely to agree with the positive aesthetic effects of surgery than men (30%). The body anxiety tended to increase as the viewing of cosmetic surgery reality shows increased. An interesting argument made from this study is the relation between lower-class viewers and self-scrutiny on body. The viewers in Buffalo reported higher level of body anxiety and makeover television consumption than did Angelenos. The researcher assumed that Angelenos were higher in socio-economics than those who were in Buffalo; thus the researcher argued that cosmetic surgery shows might encourage lower-class viewers, especially women, to monitor their bodies since the shows portrayed the ordinary people whom they would be more likely to indentify and connect.

A study conducted by Mazzeo, Trace, Mitchell, and Rachel (2006) supported the causal relations between college women's viewing of cosmetic surgery reality shows and negative outcomes, including restraint eating, self-esteem, pressure to be thin, body dissatisfaction, body objectification, anxiety, and depression. Participants in the experimental group were exposed to one episode of a cosmetic surgery reality show (*The Swan*) and participants in the control group were exposed to one episode of a home improvement show (*Clean Sweep*). The assessments were conducted immediately after viewing and two weeks later. In pre-post measures, women in *The Swan* group reported higher eating restraint, lower self-esteem, and more pressure to be thin than women in the control group. Women in higher internalization of thin ideal reported lower

self-esteem after watching *The Swan*. Despite the fact that the negative influence of self-esteem dissipated after two weeks, the pressure to be thin and restraint in eating persisted over the two-week follow-up period. To my knowledge, this study was the first study employing experimental procedures to examine the direct impact of cosmetic surgery reality shows on women's emotions and attitudes toward their body. The results suggest that cosmetic surgery shows might urge women to be thin and restrict eating, with the effects lasting at least two weeks.

In addition, the media messages regarding cosmetic surgery were saturated in young people's daily life and were found to be associated with young people's attitudes toward cosmetic surgery (Delinsky, 2005). In Delinsky's (2005) study, more than three hundred female college students were surveyed to assess their attitudes about cosmetic surgery, the likelihood of pursuing cosmetic surgery, and their likableness/stereotypes for cosmetic surgery patients. Personal and vicarious (e.g. friends or family members who have cosmetic surgery done) cosmetic surgery experience, media exposure to cosmetic surgery messages, and personality (e.g., self-esteem, sociocultural attitude towards appearance) were assessed as independent variables. About 3% of the participants had undergone cosmetic surgery and half of the participants knew personally at least one person who had cosmetic surgery done. Importantly, college women seemed to frequently expose themselves to media's cosmetic surgery messages. The survey revealed that 82% of participants saw cosmetic surgery advertisements at least 'sometimes'. The majority of participants (71%) watched cosmetic surgery shows at least 'sometimes', and 52% of participants read the articles regarding cosmetic surgery at least 'sometimes'. Regression analysis showed that media exposure to cosmetic surgery messages, vicarious experience, and importance of appearance to self-worth positively predicted the approval and future likelihood of

cosmetic surgery. Even though the assertion of causal relation is not available in this study, this study not only found that most college women are saturated with media's cosmetic surgery messages but suggested a positive relation between exposure to media's cosmetic surgery messages and the approval and future likelihood of cosmetic surgery.

Another study also revealed a positive relation between the viewing of cosmetic surgery reality shows and the intent to have cosmetic surgery (Nabi, 2009). In the study, two surveys were conducted first to study the correlations between viewing cosmetic surgery reality shows and body satisfaction, perceived benefits and risks of cosmetic surgery, and the intent to undergoing cosmetic surgery. Second, the study examined the effects of cosmetic surgery reality shows on viewers' desire for cosmetic enhancements under the theoretical frameworks of cultivation, social comparison, and social cognitive theories.

In the first survey containing 170 college students, small but not significant correlations between the overall viewing of cosmetic surgery shows and body satisfaction, perceived benefits and risks of cosmetic surgery were found. Among the individual programs, however, small correlations were found. *Extreme Makeover* was associated with greater perceived benefits. *I Want a Famous Face* was associated with greater perceived risks. *The Swan* had no effects on perceived benefits and risks. A significant but small correlation existed between the viewing of cosmetic surgery and the intent to undergo cosmetic enhancements.

The second survey containing 271 college students was conducted to search for the theoretical explanations for the relation of cosmetic surgery show viewing and the intent to undergo cosmetic, including cultivation, social comparison, and social cognitive theories. First, cultivation theory was partially supported. The amount of exposure to cosmetic surgery shows

was associated with the desire for cosmetic enhancements, but not with their estimation of the prevalence of cosmetic surgery undergone by their peers. Second, social comparison was found to possibly explain why a certain group of people were more vulnerable to cosmetic surgery reality shows. Individuals with lower body satisfaction were more likely to engage in upward comparisons and express the desire for cosmetic enhancements. The researcher also asserted that a part of the effect could be explained by social cognitive theory. The consumption of cosmetic surgery was positively correlated with body consciousness, and individuals with lower body satisfaction tended to identify more with the patients and in turn more likely to express the desire for cosmetic enhancements.

To summarize, the ways of storytelling among cosmetic surgery reality shows might not be identical. However, the prevalent messages in the cosmetic surgery reality shows seem to be similar (Poster, 2007). First, the norms of beauty for a woman are full breasts, a flat stomach, round hips, and tight skin. Any lack of the above norms is considered not normal or inferior and cosmetic surgery is the solution. Second, with a little pain and risk presented, a makeover is available for anyone who wants to improve her- or him-self physically and mentally. Third, beauty brings about success in romantic relationships and careers. The more beautiful you are, the happier you will be. By far, empirical studies for cosmetic surgery reality shows focus on body dissatisfaction and the likelihood of cosmetic surgery. Even though most of the above studies suggest a positive relation between the consumption of the shows and negative effects, the argument for the effects of cosmetic surgery shows should remain inconclusive since only few studies have been done and some research demonstrated little or no effects, such as Nabi's (2009) study.

Given by the above research, the causal relations between the viewing of cosmetic surgery reality shows and the impacts on viewers' perceptions of cosmetic surgery and body image are still unclear. The objective of this study is to employ an experimental design in order to examine whether cosmetic surgery reality shows have cognitive, attitudinal, and even behavioral effects regarding cosmetic surgery and beauty. The research question and hypotheses are addressed below. The detailed description regarding current cosmetic surgery reality shows and the video samples used for this study will be provided in the next chapter.

Research Question and Hypothesis

Based on the above analysis of cosmetic surgery shows, the general question in the present study is,

Do cosmetic surgery reality shows affect viewers' perceptions of cosmetic surgery, beauty, and physically unattractive people?

Guided by priming theory, this study proposes that after exposure to cosmetic surgery reality shows, viewers' perceptions of cosmetic surgery and patients would reflect the portrayals in the shows, which leads to the following hypotheses,

H1a: Exposure to cosmetic surgery reality shows leads individuals to perceive higher benefits of cosmetic surgery than non-exposure.

H1b: Exposure to cosmetic surgery reality shows leads individuals to perceive lower risks of plastic surgery than non-exposure.

H1c: Exposure to cosmetic surgery reality shows reinforce individuals' stereotypes of the people who do not reach the norms of beauty (e.g. hard to succeed in social relationships and careers) than non-exposure.

H1d: Exposure to cosmetic surgery reality shows reinforces individuals' beliefs of the power of beauty (e.g. more successful in social relationships and careers) than non-exposure.

Research shows that frequent priming generates more profound effects and the combination of recent and frequent priming could strengthen priming effects (Srull and Wyer, 1979; Higgins & Brendl, 1995). Given this, habitual viewing of makeover programs could result in stronger effects. Thus, the following hypotheses:

H2a: The perceived benefits of cosmetic surgery increases as the viewing of makeover shows increases.

H2b: The perceived risks of cosmetic surgery decrease as the viewing of makeover shows increases.

H2c: The perceived stereotypes of physically unattractive people get stronger as the viewing of makeover shows increases.

H2d: The belief in the power of beauty gets stronger as the viewing of makeover shows increase.

Priming effects vary across individuals (Bushman, 1995; Malamuth & Check, 1985). Body image research suggests that the effects of media exposure on the perceptions of body and body dissatisfactions are mediated by individual's attitudes toward the body (Henderson-King & Henderson-King, 1997). The present study hypothesizes that viewers' level of body anxiety would affect their perceptions of cosmetic surgery and patients.

H3: The higher level of the viewers' body anxiety, the stronger the priming effects, including the perceived benefits and risks of cosmetic surgery, the perceived stereotypes of physically unattractive people, and the beliefs of the power of beauty.

Additionally, Nabi's (2009) study suggested a small, positive correlation between the viewing of cosmetic surgery reality shows and the intent to undergo cosmetic enhancements. This study is also interested in the effect of cosmetic surgery reality shows on viewers' desire for cosmetic enhancements. Thus, the question is,

RQ1: Do cosmetic surgery reality shows increase viewers' desire for cosmetic surgery enhancement?

The next chapter explains the specific method that was used to conduct this study.

CHAPTER 3

METHODOLOGY

By using an experimental design, this study aimed to examine the causal relations between the viewing of cosmetic surgery reality shows and the perceptions of cosmetic surgery. The following sections first provide a brief description of cosmetic surgery reality shows and the video samples used in this present study, and then gives a detailed description of the study's research design and the analytical methods used.

Cosmetic Surgery Reality Shows

Extreme Makeover was the first and most popular reality plastic surgery show, which attracted around 8.2 million viewers in the 2003-2004 season (Oldenburg, 2004). *Extreme Makeover* ended in 2005 on ABC. Currently, its reruns are airing on E! and Style Channel. The success of *Extreme Makeover* generated a wave of cosmetic surgery reality shows, such as *The Swan* (Fox), *Miami Slice* (Bravo), *Dr. 90210* (E!), *Plastic Surgery: Before and After* (Discovery Health), *and Plastic Surgery: Beverly Hills* (Discovery Health). Of them, *Extreme Makeover* and *Dr. 90210* are the most popular shows and still remain on-air. Thus, this study used *Extreme Makeove*r and *Dr. 90210* as the priming stimuli to examine the effects of cosmetic surgery reality shows.

Two participants (most cases are women) are offered makeover procedures in each episode of *Extreme Makeover*. The makeover story starts by telling the audience how kind, generous, and beautiful of a mind the participant has, but that she is suffering from low self-esteem since her outside appearance does not match her inside beauty. This message is that a woman who has a beautiful mind deserves to have *Extreme Makeover* offer her a series of plastic

surgery to become beautiful to be happy and succeed in society. During the surgery consultation, the female participant appears nearly naked in front of the surgeons to receive their comments regarding the "flaws" of her body and what surgery can "correct". The "corrections" usually include a face lift, eye lift, liposuction, and breast augmentation. Besides cosmetic surgery, other cosmetic treatments like teeth veneering, a stylish hair-cut and clothing are done to highlight the results of the surgery. After the makeover is completed, the new and beautiful participant is revealed in front of her family and friends. This dramatic revelation of before-and-after is highlighted by surprises and joyful tears from family and friends, which implies the success of makeover.

Dr. 90210 premiered in 2004 on E!. Since then, it has been airing on E! and Style Network. Each episode usually contains two patients' cosmetic surgery stories. Most participants in *Dr. 90210* are in their 20s or 30s and have stable romantic relationships and/or professional lives. Unlike *Extreme Makeover* which stresses the unhappiness of being "ordinary" or "ugly," *Dr. 90210* presents the people (again, usually women) who actively pursue cosmetic surgery to get improvements to enhance their social and/or professional lives. Compared with *Extreme Makeover*, participants in *Dr. 90210* are featured as more energetic and outgoing. They make their own decision to have surgery because they are not satisfied with their bodies and think they should get improvements to be better. In addition, plastic surgeons in *Dr. 90210* are main characters rather than merely surgeons in the show. The footages of the surgeons' private lives are emphasized. They are featured as celebrities who not only are successful in their profession but have fabulous social and/or family lives.

Priming Stimuli

For this study, three video clips for three groups, one experimental group and two control groups, were edited and each of the videos lasted about 25 minutes long. The video for the experimental group depicted three cosmetic surgery stories. The first story edited from *Extreme Makeover* featured an African American woman who had been ridiculed for her nose since childhood. She was divorced and lacked confidence in romantic relationships. She stated that she was not aging gracefully and no one would like her. She received a series of cosmetic surgery procedures from the 'extreme makeover team', including brow lift, eyelid lift, rhinoplasty, liposuction, tummy tuck, Brazilian butt lift, LASIK eye surgery, and teeth whitening. After surgery, her family and friends were gathered together in a ballroom to celebrate her changes. She appeared to be younger and more confident. Her family and friends were filled with tears and joy while seeing the new her. The second story also was edited from *Extreme Makeover*. A white single mother whose lips were malformed since high school felt insecure in romantic relationships and was extremely conscious about her lips. She also underwent a series of cosmetic surgery procedures, including brow lift, eyelid lift, liposuction, tummy tuck, LASIK eye surgery, and teeth reconstruction and whitening. In her reveal, she dressed like a celebrity with full makeup and an evening gown. Her family and friends were amazed by her changes and stated that she could start dating any man from now. The third cosmetic surgery story was edited from *Dr. 90210.* A young, female speech pathologist had a part-time job in sports modeling. She underwent a breast augmentation and chemical peels in order to boost her confidence and modeling opportunity. After surgery, the camera footages focused on how "natural" her new breasts were and how confident she was while wearing sexy clothing.

Two control video clips were edited from four reality shows. Control video 1 was edited from *Supernanny* on ABC and *America's Got Talent* on Fox. Control video 2 was edited from *Kitchen Nightmare* on Fox and *The Amazing Race* on NBC. Both control video clips contained neither cosmetic surgery scenes nor thin ideal images.

Research Design

An experimental research design was applied in the present study. A posttest-only experiment model that skips a pretest that assesses the homogeneity among experimental and control groups was adopted. Because of the sharing characteristics of participants and partial randomization implemented in the experimental procedures, a posttest-only model was desirable for the present study. First, all participants were undergraduate students at the University of Tennessee. Second, the experimental conditions were randomly assigned to the groups so that the characteristics held by the participants in the experimental group were indistinguishable from those who were in the control groups (Sumser, 2001). MANOVA tests have further supported the notion of homogeneity across all groups. For this sample, MANOVA tests indicated no differences in independent variables, including demographics, television viewing, and physique anxiety, $F(22, 1180) = .97$, $p = .84$.

This present study included one experimental group and two control groups. The advantages of having two control groups were first, to have a replication by comparing the experimental group to each of two control groups, respectively. A replication is essential for an experimental design and it increases significant confidence in external validity (Cook & Campbell, 1979). Second, by having two control groups, any differences between the groups provided supplemental information in clarifying the priming effects of cosmetic surgery reality

shows. In short, by operating two control groups rather than only one, the present study was able to predict the effects of cosmetic surgery reality shows under a priming perspective. The following sections articulate the procedures implemented in the experiments.

Experimental Procedure

The Flowchart of Experimental Procedures

The flowchart presented in figure 1 illustrates the experimental procedures implemented in the present study. Before conducting the main study, pretests were conducted to revise experimental materials. Next, the participants were recruited for the main study and they were exposed to experimental videos to examine the cognitive effects of cosmetic surgery reality shows. Detailed descriptions for each experimental procedure are provided below.

Pretest Procedures

Two pilot studies were conducted before implementing the main experiment. The objective of the pilot studies was to test the experimental procedures and revise any ambiguous questionnaire items. Two sessions, one experimental session in which the participants were exposed to cosmetic surgery reality shows and one control session in which the participants were exposed to non-cosmetic surgery reality shows, were involved in the first pilot study. A total of 84 participants attended the first pilot study. The participants were allowed to choose one of the experimental sessions in which they were blind to the experimental conditions. Of participants, 43 were in the experimental group and 41 were in the control group. Two minor revisions were done based on the results of the first pretest. First, the priming video for the experimental condition was re-edited. The original video contained three cosmetic surgery stories which emphasized the improvements of appearance, confidence, and social relations. The results

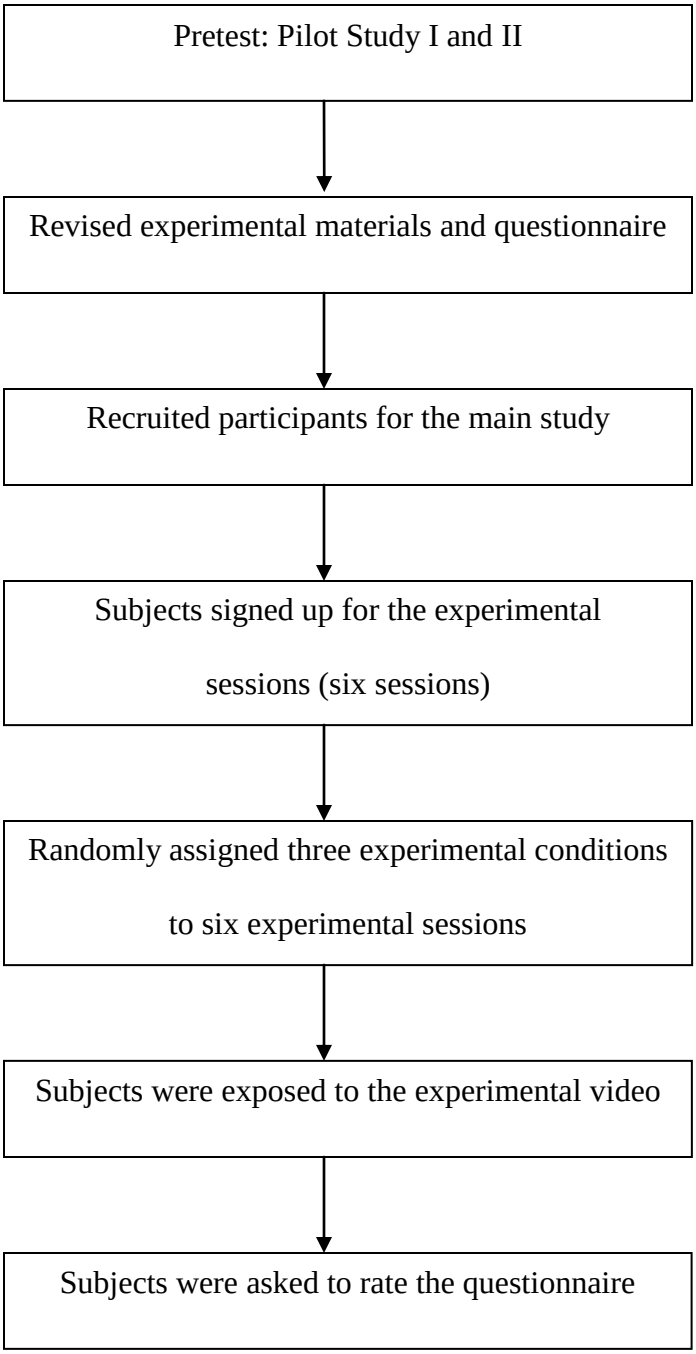

Figure 1: The Flowchart of Experimental Procedures

showed that the experimental group and the control group were significantly different in the perceived effects of improving appearance and social relations but had no differences in the perceived effect of facilitating careers. Thus, one of the cosmetic surgery stories for the experimental group was removed and instead, footage which directly featured the potential benefits of surgery in enhancing careers was added. The final video clip for the experimental group contained two cosmetic surgery stories that emphasized the effects of enhancing appearance and social relations and one story that addressed the potential benefits of facilitating careers.

The second change was about the wording of a question item. Since the storylines directly mentioned the boost of "confidence," the item assessing the perceived effect of the enhancement of self-esteem was revised from "I do not think people can enhance their self-esteem through cosmetic surgery" to "I do not think people can enhance their confidence through cosmetic surgery."

The second pilot study containing three groups (one experimental group and two control groups) was conducted to test the revised video clips and questionnaire again. A total of 131 students participated in the second pilot study. The video clips seemed to be applicable to this study and no ambiguous wording was found in the revised questionnaire.

Participants

Participants were recruited from an introductory communication course for the main study and they participated in exchange for course credit. Six sessions were held and participants were asked to sign up for one of six experimental sessions of their own choice. Each session had about 90-110 students. A total of 618 students participated in the main study but 13 subjects

were removed because of invalid values. A detailed description of screening methods used to detect invalid values is provided in the *Analysis Procedure* section later in this chapter.

The Main Study

As addressed previously, three groups, one experimental group and two control groups, were included in the main study. There were three phases involved in the main study. In Phase 1, each experimental condition (experimental group, control group 1, and control group 2) was randomly assigned twice to experimental sessions. Participants were not informed of the real purposes of this study in order to reduce the potential demand effects. When the participants entered the experimental room, they were greeted and notified that the objective of this project was to study their television viewing experiences and preferences regarding reality shows.

In Phase 2, either a priming stimulus or a neutral stimulus was introduced. The experimental group watched a 25-minute video clip that contained cosmetic surgery reality shows edited from *Extreme Makeover* and *Dr. 90210*. Control group 1 watched a 25-minute non-cosmetic surgery reality television video edited from *Supernanny* and *America's Got Talent*. Control group 2 watched a 25-minute non-cosmetic surgery reality television video edited from *Kitchen Nightmare* and *The Amazing Race*. After viewing the video clips, all participants in Phase 3 were asked to fill out a questionnaire which assessed their perceptions of cosmetic surgery, stereotypes of physically unattractive people, beliefs of the power of beauty, television viewing habits, and demographic information.

Measures

The questionnaire was developed to assess the relations between exposure to cosmetic surgery reality shows and the perceptions regarding cosmetic surgery, beauty, and patients.

Individual variables were included. The following sections describe the instrument and the descriptive results of measures contained in the present study.

Independent Measures

Television viewing. Participants were asked to report their television viewing habits, including television viewing hours and minutes per day, the viewing hours and minutes of makeover shows per week, and the viewing hours and minutes of non-makeover shows per week. On average, this sample watched 123.8 minutes television per day, 33.1 minutes of makeover shows and 130.8 minutes of non-makeover shows per week.

Physique anxiety. The Social Physique Anxiety Scale was used to measure subjects' physique anxiety (Hart, Leary, Rejeski, 1989). This scale contains twelve items, such as "I am comfortable with the appearance of my physique/figure." "I would never worry about wearing clothes that might make me look too thin or overweight." The term of physique in this scale is defined as "one's body form and structure, specifically body fat, muscle tone, and general proportion" (Hart et al, 1989, p.96). The authors note that social physique anxiety refers the anxiety regarding one's physique that occurs when one considers others' evaluations on one's physique. Since people's anxiety or shame for their bodies might influence the attitude or intent towards cosmetic surgery, the Social Physique Anxiety Scale was used to analyze whether the effects of cosmetic surgery reality shows vary in the level of body anxiety. In this sample, the Cronbach's α of Social Physique Anxiety Scale was 0.86.

Demographic variables. Participants were asked to report their gender, age, ethnicity, hometown, marital and romantic relationship status, and individual experience about cosmetic surgery. A total of 15 (2.5%) participants in this study had undergone cosmetic surgery and 588

participants (97.5%) had no cosmetic surgery experience. Gender in this sample was distributed evenly. About 50.8% (n = 306) was male and 49.3% (n = 297) was female. Age ranged from 18 – 49 years old. However, approximately 90% (n = 541) of the participants were 21 or under 21 years old. Only four participants were 45 or more than 45 years old. About 52.7% (n = 318) of the participants reported they were single and 47.3% (n = 285) of the participants reported being married or engaged in romantic relationships.

As for ethnicity, 86.7% (n = 523) was white, 8% (n = 48) was African American, 1% (n =6) was Hispanic, 0.5% (n = 3) was American Indian or Alaska Native, 0.5% (n = 3) was Native Hawaiian or Other Pacific Islander, 1.7% (n = 10) was Asian, 0.8% (n = 8) was Middle Eastern, and 0.8% (n= 8) was 'other'. For data analysis, the above races except white and African American were collapsed since the number of each race was too small to allow individual analysis. For hometown, 17.7% (n = 107) was from urban areas, 59.9% (n = 361) was from suburban areas, and 22.4% (n = 135) was from rural areas.

Dependent Measures

Stereotypes of physically unattractive people and beliefs of the power of beauty. There are certain stereotypes regarding physically unattractive people and the privileges of beauty conveyed in cosmetic surgery reality shows. Patients in cosmetic surgery reality shows frequently are featured having self-esteem, or having obstacles in social relations or careers. On the other hand, physically attractive people are implied to have advantages in both private and public lives. Thus, six items using a 7-point Likert scale with "1"indicating "strongly disagree" and "7" indicating "strongly agree" were developed to assess participants' stereotypes of physically unattractive people and beliefs of the power of beauty. The items included: (1) People

who are not considered physically attractive have fewer opportunities to engage in romantic relationships; (2) People who are not considered physically attractive have fewer opportunities in job market; (3) People who are not considered physically attractive are more isolated in their social lives; (4) Physically attractive people have advantages in romantic relationships; (5) Physically attractive people have advantages in the job market; (6) Physically attractive people have advantages in their social lives. In terms of romance, social relations and career opportunities, one's stereotypes for physically unattractive people might be or might not be highly associated with one's beliefs of the power of beauty. For instance, one might believe that good-looking people are more popular; however, this does not necessarily suggest that the same person believes that physically unattractive people can not succeed in romantic relationships. Thus, this study developed question items that separately assessed people's thoughts about the disadvantages of being physically unattractive and the advantages of being beautiful. To reduce the overlaps, principal component analysis (PCA) on this set of variables was performed to group the correlated variables into uncorrelated factors.

Perceived benefits and risks of cosmetic surgery. The items assessing viewers' perceptions of the benefits and risks of cosmetic surgery were designed based on previous research (e.g., Blum, 2003; Darisi, et al, 2005) and the researcher's interest. Nine items were developed: (1) Cosmetic surgery can help people to become more social; (2) I do not think people can enhance their confidence through cosmetic surgery; (3) Cosmetic surgery can help people become more competitive in the job market; (4) Cosmetic surgery is not an effective means to improve appearance; (5) People can have a more attractive face or body through cosmetic surgery; (6) Risks associated with cosmetic surgery are minor; (7) Major complications

after cosmetic surgery are rare; (8) Cosmetic surgery can help people have a better relationship with their partner; (9) Patients after cosmetic surgery would become happier. Again, PCA was performed to group the dimensions of the factors.

Analysis Procedure

The Flowchart of Data Analysis

The flowchart in figure 2 illustrates the procedures of data analysis performed in the main study. The detailed descriptions for the results of each important procedure are provided below.

Data Screening

A total of 618 students participated in this study. Of them, four subjects were removed because of incompletion; thus a total of 614 subjects remained in the first step of data screening. The goal of data screening is to single out the potential outliers or leverage values so that they can be analyzed manually. The data screening test, based on Mahalanobis distance, suggested 15 extreme outliers (T^2 >= 70). Of them, seven subjects were removed because of vastly conflicting responses which placed doubt on their accuracy. For instance, subject #549 had several answers that conflicted with each other. For example, the item "I am comfortable with appearance of my physique/figure" was rated "strongly agree" and "When in a bathing suit, I often feel nervous about the shape of my body" was rated "strongly agree". Four subjects were also removed because of extreme values on either Likert-scale items or television viewing hours and that seemed unlikely. For instance, subject #409 was removed because the subject listed 10 hours of television viewing per day. The last four outliers were retained as part of the data even though their age values (over 45 years old) were much larger than others.

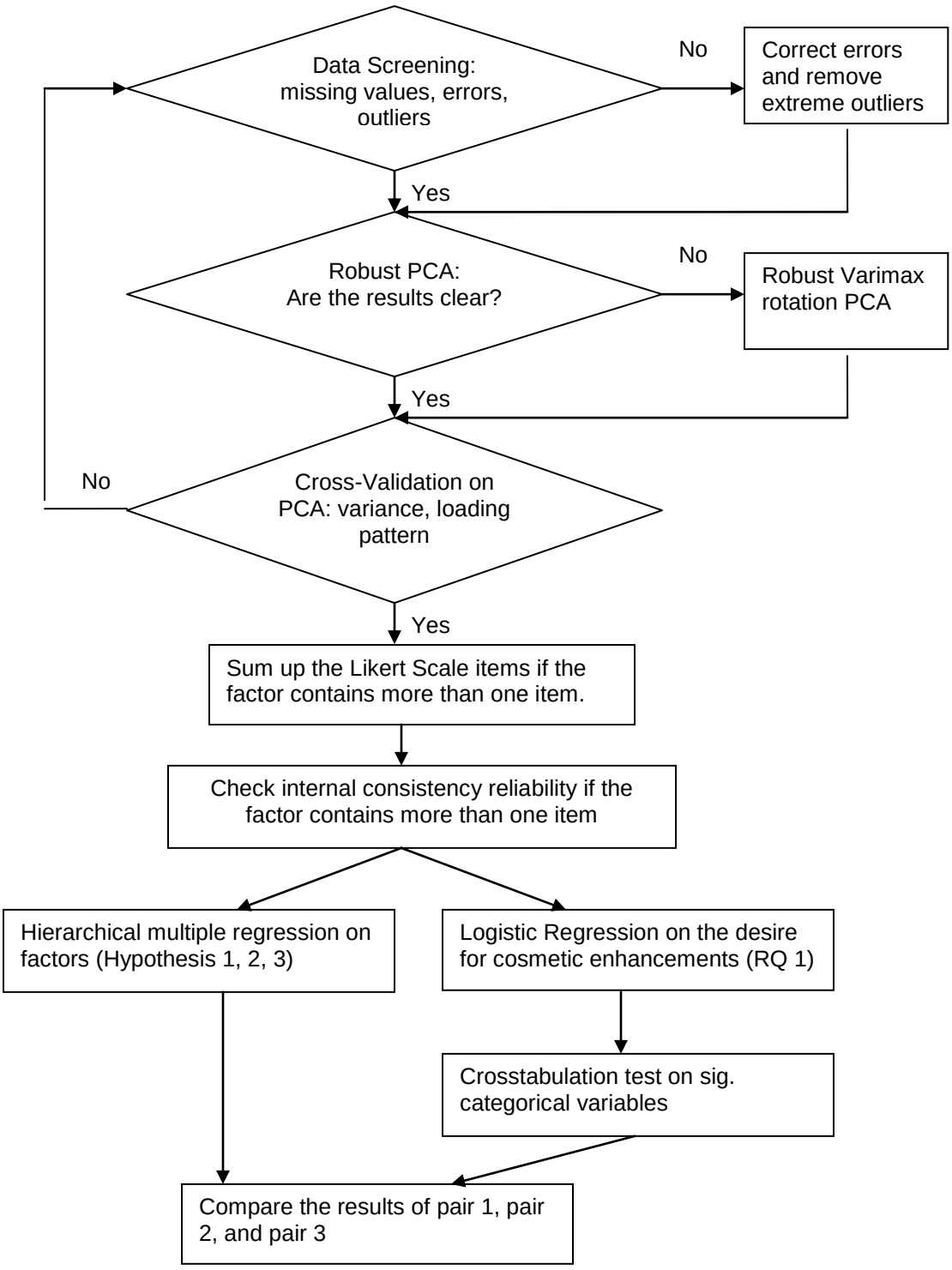

Figure 2: The Flowchart of Data Analysis

In short, fifteen extreme outliers were flagged based on Mahalanobis distance. Of them, eleven outliers were removed after a manual check. The remaining four outliers (those with extreme age values) were retained since the values appeared accurate and had no significant influences on the direction of the results. This resulted in a total of 603 subjects for further analysis.

Principal Component Analysis (PCA)

After data screening, a principal component analysis (PCA) was performed to determine their groupings. PCA transforms a set of correlated variables into a smaller set of uncorrelated variables (Johnson, 1998). Via PCA procedures, this study not only grouped dependent variables into several sets of unique variables but also reduced the number of dependent variables performed in hierarchical regression, which decreased the probability of committing a Type I error. Robust procedures were adopted in PCA because of the potential outliers. The criteria for loading on a factor were an eigenvalue of more than 1.00 and a factor loading of more than .50.

PCA on the stereotypes of physically unattractive people and beliefs of the power of beauty. A robust, non-rotated PCA with variance-covariance matrices on this set of dependent variables suggested four factors (eigenvalue = > 1.0) accounting for 90.2% variance. However, the results showed a greater loading onto the first factor, which was hard to interpret. A robust PCA with varimax rotation was then performed to obtain clearer results. Four factors which explained 91.2% variance were extracted. The first factor was labeled as *beauty power in romance* that included two items with a Cronbach's α of .68: (1) People who are not considered physically attractive have fewer opportunities to engage in romantic relationships; (2) Physically

attractive people have advantages in romantic relationships. Job opportunities for both physically unattractive and attractive people loaded onto the second factor, labeled as *beauty power in job market* with a Cronbach's α of .75. The privileges of social relations for physically attractive people and disadvantages for physically unattractive people did not load onto any of the factors so they were analyzed separately. In short, four factors were obtained for the stereotypes of physically unattractive people and beliefs of the power of beauty: *beauty power in romance, beauty power in job market, beauty power in social relations,* and *physically unattractive people's disadvantage in social relations*.

PCA on the perceived benefits and risks of cosmetic surgery. The above PCA procedures were repeated in the analysis of the perceived benefits and risks of cosmetic surgery. Since the results of PCA without rotation was not clear, again, the results obtained from a robust PCA with varimax rotation were adopted. Six factors were obtained (eigenvalue > 1.0), explaining 86.7% variance. Only one variable loaded onto the first factor: "I do not think people can enhance their confidence through cosmetic surgery." This factor was labeled as *confidence*. The second factor labeled as *surgical risks* contained two items with Cronbach's α of .70: (1) Risks associated with cosmetic surgery are minor, and (2) Major complications after cosmetic surgery are rare. The third factor labeled as *appearance* only had one item: "Cosmetic surgery is not an effective means to improve appearance." The fourth factor labeled as *competitiveness* contained two items with a Cronbach's of .68: (1) Cosmetic surgery can help people become more competitive in the job market; and (2) Cosmetic surgery can help people to become more social. The fifth factor labeled as *happiness* contained two items with Cronbach's α of .68: (1) Cosmetic surgery can help people have a better relationship with their partner; (2) Patients after cosmetic would

become happier. The last factor labeled as *attractiveness* contained only one item: People can have a more attractive face or body through cosmetic surgery. In short, six factors for the perceived benefits and one factor for risks of cosmetic surgery were extracted: *confidence, appearance, competitiveness, happiness, attractiveness,* and *surgical risks*.

Validation on PCA results

The holdout method that splits the sample into approximately two equal subsets, training sample and holdout sample, was used to do cross-validation for the results gained from PCA. The focus of cross-examination between training sample and holdout sample included variance attributing to the principal component, the percentage of variance explained by factors, and the pattern of factor loading.

The cross-validation demonstrated a considerable agreement between the holdout sample and the training sample. For the set of stereotypes of physically unattractive people and beliefs of the power of beauty, the PCA on the training sample showed similar results with the holdout sample, including the number of factors, percentage of variance explained, and pattern of factor loading. Despite the fact that there was a slight difference in terms of the individual principal component score for the loaded factors, the pattern of factor loading was considered similar. For instance, in the training sample, "physically unattractive people have advantages in romance relationships" (factor loading = .86) and "physically attractive people have fewer opportunities to engage in romantic relationships" (factor loading = .68) were loaded together. In the holdout sample, "physically attractive people have advantages in romance relationships" (factor loading = .72) was more toward with "physically attractive people have advantages in their social lives" (factor loading = .84). Since the items entered in PCA originally were highly correlated, a slight

difference in terms of loaded items was not unusual. However, the factor loading score for "physically attractive people have advantages in romance relationships" in the holdout sample was .60, which also could be loaded with "physically attractive people have advantages in romance relationships." In short, cross-validation for the stereotypes of physically unattractive people and the beliefs of the power of beauty indicated a considerable consistency between the holdout sample and the training sample

For the perceived benefits and risks of cosmetic surgery, the principal component, the percentage of variance explained by factors, and loading patterns between the training sample and the holdout sample were considerably similar. Both subsets suggested six factors with the same loading items and accounted for at least 90% variance. In short, the cross-validation between training sample and holdout sample suggested a high internal reliability for the PCA results obtained from the pooled sample.

Sequential Analysis by Hierarchical Linear Regression

After the results of PCA were validated by cross-examination, hierarchical linear regression on each factor was performed to analyze the effects of independent variables. This study used hierarchical linear regression rather than ANOVA for three reasons. First, this data had unequal variance and unequal sample size for each group. The results of ANOVA are not robust with the combination of unequal variance and unequal sample size (Rogan & Keselman, 1977). Second, regression models are able to generate predictive analyses instead of merely descriptive analyses. Third, hierarchical linear regression allows an understanding of the unique contribution of each predictor in explaining variance (Petrocelli, 2003). The primary aim of this study was to pinpoint the effects of the viewing of cosmetic surgery and other potential

predictors, such as demographics on perceptions of cosmetic surgery. Hierarchical linear regression has the advantage of partitioning the magnitude of the effects of each independent variable.

The reliability of a hierarchical linear regression greatly depends on the order of the variables entered into the model. Therefore, the order of the variables entered in the model must be carefully considered and based on theoretical assumptions. In this study, three sets of variables were entered in order into the regression models. Previous research has suggested media effects are mediated by demographics and personal experiences. Thus, the first set of independent variables included personal experience of cosmetic surgery, the level of physique anxiety, gender, race, romantic relationship, hometown, and age. The second set of independent variables entered into the model was television viewing habits since the amount of television viewing is suggested as influencing the perceptions of social reality and the magnitude of media effects (Gerbner, 1976; Morgan & Signorelli, 1990). The amount of television viewing, makeover show viewing, and non-makeover show viewing were gathered in this study. Non-makeover show viewing was dropped from the regression analyses since it was not the main interest of this study and it was highly correlated to the amount of television viewing that potentially resulted in multicollinearity. The third set of variables contained only one variable -- priming condition coding as a dummy variable, 0 for the control groups and 1 for the experimental group. An overall significance level was set at $p < .05$ and all individual statistical tests were performed at the $p < .05$ significance level as well.

Since there were two control groups and one experimental group in the present study and two control groups were designed to serve as a duplication and baseline as well, three planned

contrasts were developed: (1) “pair 1,” the experimental group versus control group1, (2) “pair 2,” the experimental group versus control group 2, and (3) “pair 3,” control group 1 versus control group 2. Before performing hierarchical linear regression, randomization Hotelling’s two sample T^2 tests were performed to check whether each pair of contrasts was significantly different. Hierarchical linear regression only would be performed for the contrasts that were found to be significantly different. Based on the theoretical assumptions of priming effects, the experimental group was hypothesized as being different from the control groups in terms of dependent variables, and two control groups were expected to have no difference. The experimental group versus control group 1 and control group 2 were significantly different, t^2 (425, 10) = 78.5, $p < .00$, and t^2 (396, 10) = 157.*9*, $p < .00$, respectively. Unexpectedly, control group 1 and control group 2 was significantly different, t^2 (379, 10) = 37.3, $p < .00$. Therefore, hierarchical linear regression was performed on the above three planned contrasts.

Sequential Analysis by Logistic Regression

For RQ1, logistic regression was applied to analyze whether exposure to cosmetic surgery reality shows increased the desire for cosmetic enhancements. Participants who rated “I would never pursue cosmetic surgery” were coded as 0. Others who rated for the intent to undergo either non-surgical, surgical, or both procedures were coded as 1. Similar to the above hierarchical linear regression procedures, the first set of the variables entered in the model was demographics, including personal experience of cosmetic surgery, the level of body anxiety, gender, race, romantic relationship, hometown, and age. The second set of the variables included television viewing and makeover show viewing. The last set of variable was priming condition.

The last step of data analysis was to compare the results of pair 1, pair 2 and pair 3 to see whether the priming effects of cosmetic surgery reality shows exist. In short, this chapter described the experimental design, analytical procedures, and validation method. The findings of the data analysis are addressed in the following chapter.

CHAPTER 4

RESULTS

This chapter addresses the results of data analysis, which answers the hypotheses and research question of this study. The detailed information of the results is articulated below.

Demographic Profile of Participants

A description of this sample's demographics and television viewing habits was provided in Chapter 3. As a brief review, important features regarding participant profile are highlighted here. A total of 603 valid subjects were used for analysis. Of them, 222 subjects were in the experimental group, 205 subjects were in control group 1, and 176 subjects were in control group 2. This study included 306 (50.7%) male participants, and 297 (49.3%) female participants. 2.5% of participants had underwent cosmetic surgery. The majority of the participants (86.7%) were white, followed by African Americans (8%). About 70% of the participants were from urban or suburban areas. They ranged in age from 18 to 49 years old, with a mean age of 19.7 years old. On average, they watched 123.8 minutes of television per day and 33.1 minutes of makeover shows per week.

Hypothesis 1a

H1a proposed that individuals exposed to cosmetic surgery reality shows would perceive higher benefits of cosmetic surgery than those exposed to non-cosmetic surgery reality shows. Principal component analysis extracted five elements describing the perceived benefits of cosmetic surgery: *confidence, appearance, competitiveness, happiness, attractiveness.* A series of sequential analysis of multiple linear regressions were performed on the above factors. Table 1 shows that for pair 1 (the experimental group vs. control group 1) and pair 2 (the experimental

Table 1. Hierarchical Linear Regression on Perceived Benefit regarding Confidence

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Variables enter in Step 1 Demographics						
Cosmetic Surgery	-1.13	-.05	.54	.60	-.10*	.00
Gender	-.07	-.05	.21	.20	-.02	-.01
Ethnicity	-.13	-.17	.18	.18	-.04	-.05
Romantic Relationship	.14	.17	.17	.18	.04	.05
Hometown	.16	.14	.14	.14	.05	.05
Age	.02	.00	.03	.03	.03	.00
Body Anxiety	.01	.01	.01	.01	.05	.07
Variables enter in Step 2 Viewing Habits						
Television	.00	.00	.00	.00	-.04	-.05
Makeover Show	.00	.00	.00	.00	.07	.07
Variables enter in Step 3 Experiment						
Priming/Neutral	.57	.61	.17	.18	.16**	.17**

Note: (1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 = .055, R^2 =.02 for Step 1, Δ R^2 =.005 for Step 2, Δ R^2 = .03 for Step 3.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 = .05, R2 =.01 for Step 1, Δ R2 =.01 for Step 2, Δ R2 = .03 for Step 3.

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

group vs. control group 2), exposure to cosmetic surgery reality shows significantly predicted the changes of the perceived benefit of confidence, explaining 3% of variance in either pair 1 or pair 2 ($\beta = .16$, $p < .00$ for pair 1, $\beta = .17$, $p < .00$ for pair 2). The experimental group was coded as 1 and control groups were coded as 0. The positive coefficients indicated that exposure to cosmetic surgery reality shows increased the perception that cosmetic surgery can enhance confidence.

Table 2 shows that the perceived benefit of appearance was significantly different between the experimental group and control groups ($\beta = .19$, $p < .00$ for pair 1, $\beta = .42$, $p < .00$ for pair 2). Table 3 shows that the perceived benefit of competitiveness was significantly different ($\beta = .22$, $p < .00$ for pair 1, $\beta = .29$, $p < .00$ for pair 2). Table 4 shows that the perceived benefit of happiness was significantly different ($\beta = .23$, $p < .00$ for pair 1, $\beta = .26$, $p < .00$ for pair 2). Table 5 shows that the perceived benefit of attractiveness also was significantly different ($\beta = .33$, $p < .00$ for pair 1, $\beta = .33$, $p < .00$ for pair 2). As Table 1- Table 5 show, all coefficients were positive, which indicated that exposure to cosmetic surgery reality shows enhanced the perceived benefits of cosmetic surgery. In short, Hypothesis 1a was supported and the results of both contrasts provided strong evidence suggesting a relation between the exposure to cosmetic surgery reality shows and the perceived benefits of cosmetic surgery, including enhancing confidence, appearance, competitiveness, happiness, and attractiveness.

Additionally, having cosmetic surgery done appeared to decrease the perceived benefit of confidence in pair 1 ($\beta = -.10$, $p < .04$) but not in pair 2. The number of subjects with cosmetic surgery experience, however, in each group was small ($n < 6$); thus the validity of the effect of cosmetic surgery experience on viewers' perceptions of cosmetic surgery is in doubt.

Ethnicity appeared only significant for the perceived benefit of appearance in pair 2

Table 2. Hierarchical Linear Regression on Perceived Benefit regarding Appearance

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Variables enter in Step 1 Demographics						
Cosmetic Surgery	-.95	.53	.48	.55	-.09	.05
Gender	.07	-.07	.19	.19	.02	-.02
Ethnicity	.01	.33	.16	.16	.00	-.10*
Romantic Relationship	.09	-.16	.15	.16	.03	-.04
Hometown	.05	.11	.13	.13	.02	.04
Age	.01	-.01	.03	.02	.02	-.01
Body Anxiety	.01	.00	.01	.01	.06	.02
Variables enter in Step 2 Viewing Habits						
Television	.00	.00	.00	.00	.02	-.02
Makeover Show	.00	.00	.00	.00	.07	.01
Variables enter in Step 3 Experiment						
Priming/Neutral	.60	1.49	.15	.16	.19***	.42***

Note: (1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 = .06, R^2 =.02 for Step 1, Δ R^2 =.01 for Step 2, Δ R^2 = .03 for Step 3.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 = .192, R2 =.01 for Step 1, Δ R2 =.002 for Step 2, Δ R2 = .18 for Step 3.

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

Table 3. Hierarchical Linear Regression on Perceived Benefit regarding Competitiveness

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Variables enter in Step 1 Demographics						
Cosmetic Surgery	-1.08	-.51	.79	.89	-.06	-.03
Gender	-.49	-.70	.31	.30	-.09	-.13
Ethnicity	-.50	-.10	.26	.26	-.09	-.02
Romantic Relationship	-.12	.09	.25	.26	-.02	.02
Hometown	-.10	-.03	.21	.21	-.02	-.01
Age	.00	.01	.05	.04	.00	.01
Body Anxiety	.02	.02	.01	.01	.07	.10
Variables enter in Step 2 Viewing Habits						
Television	.00	.00	.00	.00	.06	.05
Makeover Show	.00	.00	.00	.00	.12*	.13*
Variables enter in Step 3 Experiment						
Priming/Neutral	1.15	1.56	.25	.26	.22***	.29***

Note: (1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 = .09, R^2 =.02 for Step 1, ΔR^2 =.02 for Step 2, ΔR^2 = .05 for Step 3.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 = .12, R^2 =.02 for Step 1, ΔR^2 =.02 for Step 2, ΔR^2 = .08 for Step 3.

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

Table 4. Hierarchical Linear Regression on Perceived Benefit regarding Happiness

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Variables enter in Step 1 Demographics						
Cosmetic Surgery	-1.05	-1.13	.80	.88	-.06	-.06
Gender	-1.07	-1.06	.31	.29	-.20**	-.20***
Ethnicity	.10	.30	.26	.26	.02	.06
Romantic Relationship	-.17	-.02	.25	.26	-.03	.00
Hometown	-.03	.01	.21	.21	-.01	.00
Age	-.06	-.03	.05	.04	-.06	-.04
Body Anxiety	-.01	-.01	.01	.01	-.05	-.05
Variables enter in Step 2 Viewing Habits						
Television	.00	.00	.00	.00	-.02	.03
Makeover Show	.01	.00	.00	.00	.17**	.13*
Variables enter in Step 3 Experiment						
Priming/Neutral	1.25	1.42	.25	.26	.23***	.26***

Note: (1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 =.10, R^2 =.02 for Step 1, ΔR^2 =.03 for Step 2, ΔR^2 = .05 for Step 3.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 =.13, R^2 =.04 for Step 1, Δ R2 =.02 for Step 2, ΔR^2 = .07 for Step 3.

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

Table 5. Hierarchical Linear Regression on Perceived Benefit regarding Attractiveness

	b		SE b		β	
	pair 1	pair 2	pair 1	Pair 2	pair 1	pair 2
Variables enter in Step 1 Demographics						
Cosmetic Surgery	-.53	-.57	.42	.47	-.06	-.06
Gender	-.20	-.43	.16	.16	-.07	-.15**
Ethnicity	-.10	.19	.14	.14	-.03	.06
Romantic Relationship	-.01	.07	.13	.14	.00	.03
Hometown	.01	-.03	.11	.11	.00	-.01
Age	-.02	-.01	.02	.02	-.03	-.03
Body Anxiety	.01	.01	.01	.01	.05	.08
Variables enter in Step 2 Viewing Habits						
Television	.00	.00	.00	.00	-.02	.03
Makeover Show	.00	.00	.00	.00	.06	.06
Variables enter in Step 3 Experiment						
Priming/Neutral	.95	.95	.13	.14	.33***	.33***

Note: (1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 =.124, R^2 =.01 for Step 1, ΔR^2 =.004 for Step 2, ΔR^2 = .11 for Step 3.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 =.14, R^2 =.03 for Step 1, ΔR^2 =.01 for Step 2, ΔR^2 = .10 for Step 3.

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

(β = -.10, $p < .04$). A further analysis by dummying ethnicity showed that there was no difference between African American and white (β = .08, $p < .12$) and others and white as well (β = -.09, $p < .07$).

As Table 4 shows, gender was a strong factor affecting the perceived benefit of happiness from cosmetic surgery, (β = -.20, $p < .00$ for pair 1, β = -.20, $p < .00$ for pair 2). Since male was coded as 1 and female was coded as 2, the negative coefficients in both pairs indicated that males perceived stronger effects than females. They agreed more that cosmetic surgery can enhance happiness. The main effect of gender in perceived happiness after cosmetic surgery was also supported by the contrast of control group 1 and control group 2. In control groups, males tended to agree more than females that people can be happier after cosmetic surgery (β = -.13, $p < .03$).

In addition, gender was found to influence the perceived benefit of attractiveness in pair 2 (see Table 5, β = -.15, $p < .01$). In pair 2, male participants perceived a stronger effect that cosmetic surgery can enhance attractiveness. However, this effect was not supported by either pair 1 or the contrast of control groups (β = -.07, $p < .22$ for pair 1, β = -.05, $p < .44$ for control groups). In short, happiness was the only effect supported by both pairs. Males tended to agree more that patients after cosmetic surgery can be much happier.

Hypothesis 1b

In general, H1b was supported. H1b proposed that exposure to cosmetic surgery reality shows would lower the perceived risks of cosmetic surgery. The results from the experimental group and two control groups were slightly different but exhibited a similar pattern. Table 6 shows a significant difference between the experimental group and control group 2 (β = .13, $p < .00$). The difference between the experimental group and control group 1 was close to

Table 6. Hierarchical Linear Regression on the Perceived Risks of Cosmetic Surgery

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	Pair 1	pair 2
Variables enter in Step 1 Demographics						
Cosmetic Surgery	-1.16	-1.16	.69	.78	-.08	-.07
Gender	-1.50	-1.92	.27	.26	-.32***	-.39***
Ethnicity	.02	.05	.23	.23	.00	.01
Romantic Relationship	-.10	.06	.22	.23	-.02	.01
Hometown	.09	.22	.18	.18	.02	.06
Age	-.05	-.04	.04	.03	-.06	-.06
Body Anxiety	.00	.00	.01	.01	.01	.00
Variables enter in Step 2 Viewing Habits						
Television	.00	.00	.00	.00	-.11*	-.12*
Makeover Show	.00	.00	.00	.00	.06	.09
Variables enter in Step 3 Experiment						
Priming/Neutral	.36	.66	.22	.23	.08	.13**

Note:
(1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 =.11, R^2 =.09 for Step 1, Δ R^2 =.01 for Step 2, Δ R^2 = .01 for Step 3.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 =.118, R^2 =.14 for Step 1, Δ R^2 =.02 for Step 2, Δ R^2 = .02 for Step 3.

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

significant (β = .08, $p < .10$). Since the question items in this study asked participants to rate the degree to which they believed the low risk of cosmetic surgery, positive coefficients indicated a positive relation between exposure to cosmetic surgery reality shows and the perceived low-risks of cosmetic surgery.

In addition, gender was found as a significant factor that affected the perceived risks of cosmetic surgery. Pair 1 and pair 2 both suggested that male participants tended to perceive lower surgical risks than female participants (β = -.32, $p < .00$ for pair 1, β = -.39, $p < .00$ for pair 2). The main effect of gender on perceived surgical risks of cosmetic surgery was also supported by the contrast of control group 1 and control group 2 (β = -.35, $p < .00$). Male participants in control groups tended to perceive lower surgical risks than did female participants.

In short, males and females held different perceptions of surgical risks regarding cosmetic surgery. Males tended to perceive lower surgical risks than did females. The priming effect of cosmetic surgery reality shows was supported by pair 2. The coefficients in pair 1 and pair 2 both suggested the direction of the effect of cosmetic surgery reality shows was lowering the perceived surgical risks, even though the priming effect in pair 1 was not significant.

Hypothesis 1c

H1c was supported. H1c was interested in whether exposure to cosmetic surgery shows would reinforce viewers' stereotypes of physically unattractive people. Principal component analysis, as explained in Chapter 3, suggested one factor regarding the perceived stereotype of physically unattractive people – *having disadvantages in social relations*. As Table 7 shows, exposure to cosmetic surgery reality shows was significant in both pair 1 and pair 2 (β = .16, $p < .00$ for pair 1, β = .18, $p < .00$ for pair 2). Positive coefficients indicated that participants in the

Table 7. Hierarchical Linear Regression on the Perceived Disadvantages of Physically Unattractive People in Social Relations

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Variables enter in Step 1 Demographics						
Cosmetic Surgery	-.16	-.75	.46	.50	-.02	-.07
Gender	-.64	-.43	.18	.17	-.21***	-.14**
Ethnicity	.04	-.15	.15	.15	.01	-.05
Romantic Relationship	-.14	.00	.15	.15	-.05	.00
Hometown	-.17	-.02	.12	.12	-.07	-.01
Age	-.04	-.01	.03	.02	-.07	-.02
Body Anxiety	.02	.02	.01	.01	.14**	.15**
Variables enter in Step 2 Viewing Habits						
Television	.00	.00	.00	.00	.08	.13*
Makeover Show	.00	.00	.00	.00	.11*	.09
Variables enter in Step 3 Experiment						
Priming/Neutral	.50	.55	.15	.15	.16**	.18***

Note: (1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 =.09, R^2 =.04 for Step 1, ΔR^2 =.02 for Step 2, ΔR^2 = .03 for Step 3.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 =.10, R^2 =.04 for Step 1, ΔR^2 =.03 for Step 2, ΔR^2 = .03 for Step 3.

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

experimental group agreed more than those in control groups that physically unattractive people were at a disadvantage with regard to social relations.

Gender was significantly different in the perception of physically unattractive people in social relations (Table 7, $\beta = -.21$, $p < .00$ for pair 1, $\beta = -.14$, $p < .01$ for pair 2). Male participants tended to agree more than female participants that physically unattractive people were at a disadvantage with regard to social relations. The main effect of gender in the perceived disadvantages of physically unattractive people in social relations was also supported by the control groups. Male participants agreed more that physically unattractive people were at a disadvantage in social relations ($\beta = -.17$, $p < .00$). In short, exposure to cosmetic surgery reality shows and gender significantly influenced the perceived disadvantages of physically unattractive people with regard to social relations.

Hypothesis 1d

H1d specifically looked at whether exposure to cosmetic surgery reality shows would reinforce the beliefs of the power of beauty. Principal component analysis, as explained in Chapter 3, extracted three elements describing the power of beauty: *beauty power in romance, beauty power in job market, beauty power in social relations.* As Table 8 shows, exposure to cosmetic surgery reality shows affected the perceived beauty power in romance in pair 1 and pair 2 ($\beta = .21$, $p <.00$ for pair 1, $\beta = .17$, $p < .01$ for pair 2). The positive coefficients indicated that exposure to cosmetic surgery reality shows reinforced the belief of beauty power in romantic relationships. The participants in the experimental group tended to think that physically attractive people were at an advantage in romantic relationships than those in control groups.

Table 8. Hierarchical Linear Regression on the Perceived Beauty Power in Romance

	b		SE b		β	
	Pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Variables enter in Step 1 Demographics						
Cosmetic Surgery	-.66	-2.07	.79	.88	-.04	-.12*
Gender	-1.14	-.75	.31	.30	-.21***	-.14*
Ethnicity	.72	.04	.26	.26	.13**	.01
Romantic Relationship	-.43	-.41	.25	.26	-.08	-.08
Hometown	-.18	.05	.21	.21	-.04	.01
Age	-.06	-.06	.05	.04	-.06	-.08
Body Anxiety	.03	.02	.01	.01	.13*	.07
Variables enter in Step 2 Viewing Habits						
Television	.00	.00	.00	.00	.07	.07
Makeover Show	.01	.00	.00	.00	.17**	.10
Variables enter in Step 3 Experiment						
Priming/Neutral	1.15	.91	.25	.26	.21***	.17**

Note:

(1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 =.14, R^2 =.05 for Step 1, ΔR^2 =.04 for Step 2, ΔR^2 = .05 for Step 3.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 =.10, R^2 =.05 for Step 1, ΔR^2 =.02 for Step 2, ΔR^2 = .03 for Step 3.

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

Gender was another significant factor (Table 8, β = -.21, p <.00 for pair 1, β = -.14, p < .01 for pair 2). Male participants tended to think that physically attractive people had more advantages with regard to romantic relationships. The result of control groups also revealed the same pattern (β = -.12, p < .04). Male participants agreed more that physically attractive people had an advantage in romantic relationships.

As Table 8 shows, ethnicity was a significant factor in pair 1 but not in pair 2 (β = .13, p < .01 for pair 1, β = .01, p < .40 for pair 2). A regression analysis showed that compared to whites, African Americans agreed more that physically attractive people were at an advantage in romantic relationships (β = .11, p < .03). However, this finding was not supported by pair 2. The effect of ethnicity on the perception of physical unattractiveness and romance was not consistent.

Compared to control group 2, participants in the experimental group who had underwent cosmetic surgery tended to disagree that good-looking people were more privileged in romantic relationships (β = -.12, p < .02). However, this finding was not supported by either pair 1 (β = -.04, p < .40) or the contrast of control group 1 and control group 2 (β = -.02, p < .69).

In short, gender and exposure to cosmetic surgery reality shows were important factors that reinforced the belief of beauty power in romantic relationships. Other factors including ethnicity and cosmetic surgery experience might have effects but the results were not consistent among pair 1, pair 2, and control groups.

The effect of cosmetic surgery reality shows on the belief of beauty power in the job market was not conclusive. As Table 9 shows, priming was significant in pair 2 (β = .15, p < .00) but not significant in pair 1 (β = .03, p < .55). Compared to control group 2, participants in the experimental group tended to agree more that physically attractive people have advantages with

Table 9. Hierarchical Linear Regression on the Perceived Beauty Power in Job Market

	B		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Variables enter in Step 1 Demographics						
Cosmetic Surgery	-.37	-.85	.75	.83	-.02	-.05
Gender	-.56	-.58	.29	.28	-.11	-.12*
Ethnicity	-.33	-.31	.25	.25	-.07	-.06
Romantic Relationship	.03	-.11	.24	.24	.01	-.02
Hometown	-.33	-.31	.20	.19	-.08	-.08
Age	.00	.01	.04	.04	.00	.01
Body Anxiety	.04	.03	.01	.01	.18**	.14**
Variables enter in Step 2 Viewing Habits						
Television	.00	.00	.00	.00	.07	.02
Makeover Show	.00	.00	.00	.00	.11*	.08
Variables enter in Step 3 Experiment						
Priming/Neutral	.14	.72	.24	.24	.03	.15**

Note: (1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 =.051, R^2 =.03 for Step 1, ΔR^2 =.02 for Step 2, ΔR^2 = .001 for Step 3.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 =.07, R^2 =.04 for Step 1, ΔR^2 =.01 for Step 2, ΔR^2 = .02 for Step 3.

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

regard to careers. Pair 1 did not show the difference; however, the coefficient was also positive, which was consistent with pair 2. In addition, gender was found to affect the belief of beauty power in the job market. The factor of gender was close to significant in pair 1(β = -.11, p < .06) and it was significant in pair 2 (β = -.12, p < .04). The main effect of gender on the belief of beauty power in the job market was also supported by the contrast of control group 1 and control group 2 (β = -.15, p < .01). Again, male participants appeared to think that physically attractive people have more advantages in the job market.

As Table 10 shows, exposure to cosmetic surgery reality shows had no effects on the belief of beauty power in social relations. The factor of priming was not significant in both pairs (β = .06, p < .26 for pair 1, β = .09, p < .07 for pair 2). Although the factor of priming was close to significant in pair 2, the results in pair 1 strongly suggested that there was no difference in the perceived beauty power regarding social relations between the experimental group and control groups.

In short, H1d was partially supported. Principal component analysis suggested three factors regarding the beliefs of beauty power, including romantic relationships, job market, and social relations. Exposure to cosmetic surgery reality shows had effects on reinforcing the beauty power in romantic relationships and the job market. For the perceived beauty power in social relations, no consistent results were demonstrated in the differences between the experimental group and control groups.

Hypothesis 2a

H2a was partially supported. H2a – H2d focused on the effects of habitual makeover show viewing rather than on the one-shot exposure. H2a proposed that the perceived benefits of

Table 10. Hierarchical Linear Regression on the Perceived Beauty Power in Social Relations

	b		SE b		B	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Variables enter in Step 1 Demographics						
Cosmetic Surgery	-.74	-.89	.44	.50	-.08	-.09
Gender	-.30	-.51	.17	.17	-.11	-.17**
Ethnicity	.19	-.13	.14	.15	.06	-.05
Romantic Relationship	-.28	-.15	.14	.15	-.10*	-.05
Hometown	-.09	-.13	.11	.12	-.04	-.06
Age	-.02	-.01	.03	.02	-.03	-.02
Body Anxiety	.01	.02	.01	.01	.11*	.17**
Variables enter in Step 2 Viewing Habits						
Television	.00	.00	.00	.00	.05	.08
Makeover Show	.00	.00	.00	.00	.09	.06
Variables enter in Step 3 Experiment						
Priming/Neutral	.16	.27	.14	.15	.06	.09

Note:

(1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 =.043, R^2 =.03 for Step 1, ΔR^2 =.01 for Step 2, ΔR^2 = .003 for Step 3.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 =.07, R^2 =.05 for Step 1, ΔR^2 =.01 for Step 2, ΔR^2 = .01 for Step 3.

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

cosmetic surgery would increase as the amount of makeover show viewing increased. The five factors that described the perceived benefits of cosmetic surgery were analyzed for H2b, including confidence, appearance, competitiveness, happiness, attractiveness. Table 1 – 5 show that the viewing of makeover shows had effects on the perceived benefits of competitiveness and happiness but had no effects on confidence, appearance, and attractiveness. As Table 3 shows, the coefficients of makeover show viewing on competitiveness in pair 1 and pair 2 were positive ($\beta = .12$, $p < .02$ for pair 1, $\beta = .13$, $p < .02$), which indicated that the perceived benefit of cosmetic surgery in competitiveness increased as the viewing of makeover shows increased. Than main effect of makeover show viewing on the perceived benefit of competitiveness was also supported by the contrast of control groups ($\beta = .14$, $p < .01$). Additionally, Table 4 shows that the perceived benefit of cosmetic surgery in enhancing happiness increased as the consumption of makeover shows increased ($\beta = .17$, $p < .00$ for pair 1, $\beta = .13$, $p < .02$). However, the main effect of makeover show viewing on the perceived benefit of happiness was not supported by the contrast of control groups ($\beta = .05$, $p < .39$).

Hypothesis 2b

H2b hypothesized that the perceived risks of cosmetic surgery would decrease as the viewing of makeover shows increased. Table 6 shows that the amount of makeover show viewing was not significant in both pair 1 and pair 2 ($\beta = .06$, $p < .28$ for pair 1, $\beta = .09$, $p < .07$ for pair 2). However, the main effect of makeover show viewing was significant in the contrast of control group 1 and control group 2 ($\beta = .11$, $p < .04$), which suggested that the more the makeover shows people watched, the more they agreed that the surgical risks of cosmetic

surgery was low. This finding was not conclusive since makeover show viewing was not significant in pair 1 and pair 2.

Daily television viewing was significantly different in the perceived risks of cosmetic surgery (see Table 6, $\beta = -.11$, $p < .02$ for pair 1, $\beta = -.12$, $p < .02$ for pair 2). The negative coefficients indicated that the perceived risks of cosmetic surgery increased as the amount of daily television viewing increased. The main effect of television viewing on increasing the perceived risks of cosmetic surgery was not supported by the contrast of control group 1 and control 2 ($\beta = -.07$, $p < .17$) but it suggested a negative relation between television viewing and perceived low-risk of cosmetic surgery. In short, the direction of the effect of makeover show viewing seemed to lower the perceived surgical risks even though the levels of significance were not strong in all contrasts. In contrast, daily television viewing appeared to increase the perceived risks of cosmetic surgery.

Hypothesis 2c

H2c proposed that the habitual viewing of makeover shows would reinforce the stereotypes of physically unattractive people. Suggested by principal component analysis, the perceived stereotype of the disadvantages of physically unattractive people was in regard to social relations. Table 7 shows that the consumption of makeover shows was significant in pair 1 ($\beta = .11$, $p < .04$). The perceived disadvantages for physically unattractive people in social relations tended to increase as the amount of makeover show viewing increased. However, the main effect of makeover show viewing on the perceived disadvantages for physically unattractive people in social relation was not supported by both pair 2 ($\beta = .09$, $p < .09$) and the contrast of control group 1 and control group 2 ($\beta = .00$, $p < .98$). In short, the effect of habitual

makeover show viewing on the perceived disadvantages of physically unattractive people in social relations was not conclusive.

Hypothesis 2d

H2d was partially supported. H2d looked at whether the viewing of makeover show would enhance the beliefs of beauty power. Three elements of the perceived beauty power were analyzed, including romantic relationships, job market, and social relations. Table 8 shows that the habitual viewing of makeover shows had effects on the perceived beauty power in romantic relationships in pair 1 ($\beta = .17$, $p < .00$) and it was close to significant in pair 2 ($\beta = .10$, $p < .06$). The main effect of makeover show viewing on the perceived beauty power in romantic relationship was also supported by the contrast of control groups ($\beta = .11$, $p < .04$). The belief of beauty power in romantic relationships tended to increase as the amount of makeover show viewing increased.

Makeover viewing was significant for the perceived beauty power in the job market in pair 1 (see Table 9, $\beta = .11$, $p < .04$) and control groups ($\beta = .13$, $p < .02$). Although makeover show viewing was not significant in pair 2 ($\beta = .08$, $p < .13$), the positive coefficient was consistent with pair 1 and control groups, which suggested that the direction of the effect of makeover show viewing was to reinforce the belief of beauty privileges in the job market. For the perceived beauty power in social relations, makeover show viewing was found to be not significant in pair 1, pair 2, and the contrast of control group, which suggested that makeover show viewing had no effect on the perceived beauty power in social relations. Also, daily television viewing was found to have no effects on the perceived beauty power. In short,

makeover show viewing had effects on the perceived beauty power in romantic relationships and the job market but no effects on the perceived beauty power in social relations.

Based on priming theory, the combination of frequent viewing and recent exposure is expected to have more profound effects. To analyze whether the effect of recent exposure to cosmetic surgery reality shows varies in the amount of makeover television viewing, an interaction term priming*makeover show viewing was created. The variable of makeover show viewing was centered to reduce the multicollinearity problem. As Table 11 shows, only the perceived disadvantages for physically unattractive people in social relations was affected by the interaction of priming and makeover show viewing ($\beta = .18$, $p < .01$ for pair 1, $\beta = .15$, $p < .03$ for pair 2), explaining 2% and 1% variance in pair 1 and pair 2, respectively. Positive coefficients in both pairs indicated a stronger effect among individuals who habitually consumed makeover show and were primed with cosmetic surgery reality shows.

Figure 3 and Figure 4 show that the magnitude of priming effects on the perceived disadvantages in social relations for physically unattractive people depended on the amount of makeover show viewing. The more consumption of makeover shows, the stronger the effect.

Hypothesis 3

H3 stated that the magnitude of the priming effect would differ according to the level of body anxiety - the higher the level of body anxiety, the stronger the priming effect. Body anxiety was measured by the Social Physique Anxiety Scale (Hart et. al, 1989). Before analyzing the interaction effect of priming and body anxiety, the simple main effect of body anxiety was examined. As Table 1-6 show, body anxiety was not significant, indicating that the perceived benefits and risks of cosmetic surgery were not influenced by the level of body anxiety.

Table 11. Interaction Effect of Priming and Makeover Show Viewing on the Perceived Disadvantages of Physically Unattractive in Social Relations

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1						
Cosmetic Surgery	-.08	-.87	.45	.50	-.01	-.09
Gender	-.64	-.46	.18	.17	-.21***	-.15**
Ethnicity	.03	-.15	.15	.15	.01	-.05
Romantic Relationship	-.12	.00	.15	.15	-.04	.00
Hometown	-.21	-.03	.12	.12	-.08	-.01
Age	-.03	-.01	.03	.02	-.06	-.02
Body Anxiety	.02	.02	.01	.01	.14*	.16**
Television	.00	.00	.00	.00	.08	.12*
Makeover Show (MS)	.00	.00	.00	.00	-.02	-.02
Priming/Neutral	.50	.54	.14	.15	.16***	.18***
Step 2						
Priming/Neutral*MS	.00	.00	.00	.00	.18**	.15*

Note: (1) Pair 1 = Experimental Group vs. Control 1, N= 427, overall R^2 =.09, R^2 =.08 for Step 1, Δ R^2 =.01 for Step 2.

(2) Pair 2 = Experimental Group vs. Control 2, N= 398, overall R^2 =.11, R^2 =.10 for Step 1, Δ R^2 =.01 for Step 2

(3) β = standardized coefficient.

(4) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(5) *p < .05. **p < .01. ***p < .001.

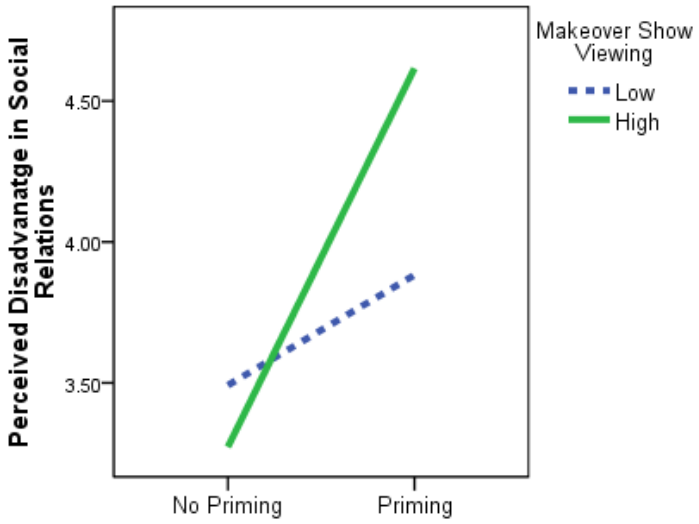

Figure 3. Pair 1: Interaction between exposure to cosmetic surgery shows and habitual makeover show viewing for the effect of perceived disadvantages of physically unattractive people in social relations.

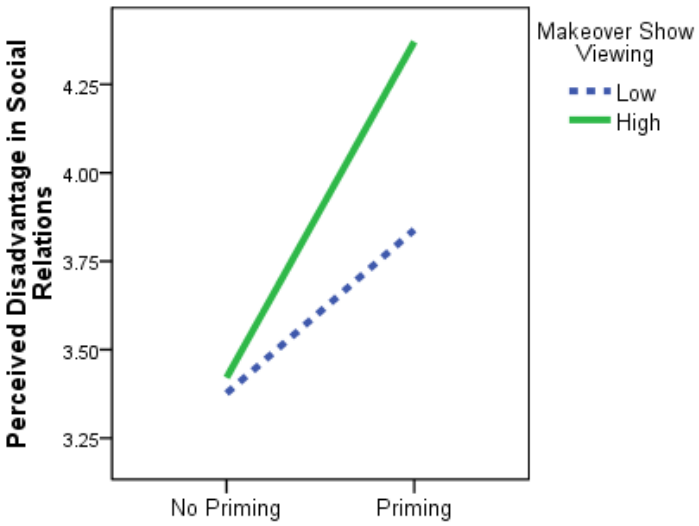

Figure 4. Pair 2: Interaction between exposure to cosmetic surgery shows and habitual makeover show viewing for the effect of perceived disadvantages of physically unattractive people in social relations.

Body anxiety was a significant factor in predicting the perceived disadvantages for physically unattractive people in social relations (see Table 7, $\beta = .14$, $p < .01$ for pair 1, $\beta = .15$, $p < .00$ for pair 2).The perceived disadvantage of physically unattractive people increased as the level of body anxiety increased. However, this simple main effect was not supported by the contrast of control groups. The perceived disadvantages for physically unattractive people was not significantly different between control group 1 and control group 2 ($\beta = .05$, $p < .39$).

As Table 8 shows, body anxiety was significant for the perceived beauty power in romantic relationships in pair 1 but it was not significant in pair 2 ($\beta = .13$, $p < .01$ for pair 1, $\beta = .07$, $p < .14$ for pair 2). Table 9 shows that body anxiety positively affected the perceived beauty power in the job market ($\beta = .18$, $p < .00$ for pair 1, $\beta = .14$, $p < .01$ for pair 2). The perceived beauty power in the job market increased as the level of body anxiety increased. Similarly, body anxiety also increased the perceived beauty power in social relations (see Table 10, $\beta = .11$, $p < .05$ for pair 1, $\beta = .17$, $p < .00$ for pair 2).

Second, a series of regression analyses including the interaction term "body anxiety*priming" was performed to examine whether the priming effect interacted with body anxiety. A total of ten factors describing priming effects were analyzed, including the perceived benefit of confidence, appearance, competitiveness, happiness, attractiveness, the perceived surgical risks, physically unattractive people's disadvantage in social relations, beauty power in romance, beauty power in the job market, and beauty power in social relations. There was no additive effects obtained from the interaction of priming and body anxiety in both pair 1 and pair 2, which indicated the effect of priming and body anxiety on the perceptions of cosmetic surgery was uncorrelated.

In short, H3 was not support. The magnitude of priming effect did not depend on the level of body anxiety between the experimental group and control groups. For the simple main effect, body anxiety had no effects on the perceived benefits or risks of cosmetic surgery. However, body anxiety was found to affect the perceived disadvantages of physically unattractive people and the beliefs of beauty power. As individuals experienced higher body anxiety, they were more likely to experience stronger beliefs regarding physical unattractiveness in terms of social relations. Meanwhile, they were more likely to believe that good-looking people were more privileged in romantic relationships, careers, and social relations.

The Results of Control Groups

Hotelling's T^2 tests indicated that there was at least one dependent variable that differed between control group 1 and control group 2, t^2 (379, 10) = 37.3, $p < .00$. Thus, multiple regression tests were performed on the above ten dependent variables. Two dependent variables were found to be significantly different. The perceived benefits of appearance enhancement (β = -.25, p <.00) and the perceived beauty power in social relations (β = -.11, $p < .03$) were significantly different between control group 1 and control group 2 (see Table 12 and Table 13). Control group 1 was exposed to *Kitchen Nightmare* and *The Amazing Race*. Control group 2 was exposed to *America's Got Talent* and *Suppernanny*. The negative coefficients indicated that compared to control group 2, control group 1 tended to agree more that cosmetic surgery could enhance appearance, and that beauty had advantages regarding social relations. However, the relation between the neutral priming and the perceived beauty power in social relations was weak, with only 1% variance explained.

Table 12. Hierarchical Multiple Regression on Perceived Benefit in Appearance (Pair 3: Control Groups)

	b	SE b	β
Step 1 Demographics			
Cosmetic Surgery	-.30	.54	-.03
Gender	.01	.20	.00
Ethnicity	.03	.16	.01
Romantic Relationship	.05	.17	.02
Hometown	-.10	.14	-.04
Age	-.02	.03	-.04
Body Anxiety	.01	.01	.05
Step 2 Viewing Habits			
Television	.00	.00	.02
Makeover Show	.00	.00	.01
Step 3 Experiment			
Neutral (Control Groups)	-.85	.17	-.25***

Note: (1) N= 381, overall R^2 =.07, R^2 =.009 for Step 1, Δ R^2 =.001 for Step 2, Δ R^2 = .06 for Step 3.

(2) β = standardized coefficient.

(3) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(4) *p < .05. **p < .01. ***p < .001.

Table 13. Hierarchical Multiple Regression on Beauty Power in Social Relations (Pair 3: Control Groups)

	b	SE b	β
Step 1 Demographics			
Cosmetic Surgery	-1.06	.81	-.07
Gender	-.74	.30	-.15*
Ethnicity	-.29	.24	-.06
Romantic Relationship	-.31	.26	-.06
Hometown	-.26	.20	-.07
Age	.05	.05	.05
Body Anxiety	.02	.01	.11*
Step 2 Viewing Habits			
Television	.00	.00	-.05
Makeover Show	.00	.00	.13*
Step 3 Experiment			
Neutral (Control Groups)	-.56	.26	-.11*

Note: (1) N= 381, overall R^2 =.06, R2 =.03 for Step 1, Δ R2 =.02 for Step 2, Δ R2 = .01 for Step 3.

(2) β = standardized coefficient.

(3) The above table provided the results of Step 3 in the hierarchical linear regression. The results of Step 1 and Step 2 are omitted from the table.

(4) *p < .05. **p < .01. ***p < .001.

Research Question 1

RQ1 examined whether exposure to cosmetic surgery reality shows would enhance the desire for cosmetic enhancements. Participants who reported "would never pursue cosmetic surgery" were coded as 0 for "no" and participants who reported "might undergo non-surgical cosmetic procedures," "might undergo surgical cosmetic procedures," "had cosmetic surgery and would do so again," or any of them were coded as 1 for "yes." Sequential logistic regressions controlling for demographics and television viewing habits were performed to analyze the effect of exposure to cosmetic surgery reality shows on viewers' desire for cosmetic enhancements. "No" group was set as reference in the regression model. Table 14 shows that the factor of exposure to cosmetic surgery reality shows was close to significant in both pair 1 and pair 2 (B =.45, $p < .06$ for pair 1, $B = .41$, $p < .09$ for pair 2). For pair 1, those who were exposed to cosmetic surgery reality shows had higher odds (1.6 times) of reporting the desire for cosmetic enhancements than did those who were exposed to non-cosmetic surgery reality shows. For pair 2, the odds of reporting a desire for cosmetic enhancements among those exposed to cosmetic surgery reality shows were 1.5 times higher than among those exposed to non-cosmetic surgery reality shows. The effect of exposure to cosmetic surgery reality shows is made clearer by looking at the comparison between the two control groups. Exposure to non-cosmetic surgery reality shows was found to be strongly non-significant (B = -.01, $p < .99$). There was no difference in the desire for cosmetic surgery enhancements between control group 1 and control group 2.

In addition, the main effects of body anxiety and gender contributed to the desire for cosmetic enhancements. The level of body anxiety increased the desire for cosmetic

Table 14. Logistic Regression on the Desire for Cosmetic Enhancements

	Pair 1			Pair 2			Pair 3 (Control Groups)		
Predictor	*b*	*SE*	Exp(*b*)	*b*	*SE*	Exp(*b*)	*b*	*SE*	Exp(*b*)
Gender	1.42	.28	4.13***	.82	.27	2.26**	1.51	.30	4.53***
Body Anxiety	.03	.01	.97**	.05	.01	.95***	.04	.01	.96***
Priming/Neutral	.45	.23	1.56	.41	.24	1.51	-.01	.25	.99
Constant	1.02	1.32	2.78	3.57	2.04	35.55	2.50	1.61	12.2
χ^2		100.52			85.62			92.22	
df		12			12			12	
% desire for cosmetic enhancements		35.1%			35.9%			31.8%	

Note: (1) Non-significant background variables including cosmetic surgery experience, ethnicity, romantic relationship, hometown, age, television viewing, and makeover show viewing, are omitted from the table. Exp(*b*) = odds ratios.

(2) Male is coded as 1 and female is coded as 0. Desire for cosmetic enhancements is coded as 1 and no desire for cosmetic enhancements is coded as 0.

(3) *$p < .05$. **$p < .01$. ***$p < .001$

enhancements (B = .03, p < .00 for pair 1, B = .05, p < .00, for pair 2, B = .04, p < .00, for control groups). The results of pair 1, pair 2, and control groups were consistent. As the level of body anxiety increased one unit, the odds of reporting the desire for cosmetic enhancements increased 3% in pair 1, 5% in pair 2, and 4% in the control groups.

Females appeared more likely to report the desire for cosmetic enhancements (B = 1.42, p < .00 for pair 1, B = .82, p < .02, for pair 2, B = 1.51, p < .00, for control groups). The odds of females reporting the desire for cosmetic enhancements were 4.1 times the odds of males reporting the desire for cosmetic enhancements in pair 1. Pair 2 and the controls groups suggested similar results. The odds of females reporting the desire for cosmetic enhancements were 2.3 times higher than males in pair 2, and 4.5 times higher in control groups.

Since gender and priming conditions are categorical variables, crosstabulation tests of gender*priming*desire for cosmetic enhancements were performed. As Table 15 shows, the relation between priming and the desire for cosmetic enhancements was significant for male participants (χ^2 = 7.4, p < .01) but not significant for female participants (χ^2 = .24, p < .63) in pair 1. For male participants, exposure to cosmetic surgery shows increased the odds of expressing a desire for undergoing cosmetic enhancements. In pair 1, of the males who were exposed to non-cosmetic surgery reality shows, the number reporting the desire for cosmetic enhancements (n = 10) was less than expected (n = 17.6). On the other hand, of the males who were exposed to cosmetic surgery reality shows, the number reporting the desire for cosmetic enhancements (n = 28) was higher than expected (n = 20.4). Of the male participants who reported the desire for cosmetic surgery enhancements, 26.3% were exposed to the neutral video and 73.7% were exposed to the cosmetic surgery reality shows.

Table 15. Pair 1: Gender*Priming*Cosmetic Enhancements Crosstabulation

			Cosmetic Enhancements		
			No	Yes	Total
Male	Non-cosmetic Surgery Shows	Count	94	10	104
		Expected Count	86.4	17.6	104.0
		% within no, yes	50.5%	26.3%	46.4%
	Cosmetic Surgery Show	Count	92	28	120
		Expected Count	99.6	20.4	120.0
		% within no, yes	49.5%	73.7%	53.6%
	Total	Count	186	38	224
		Expected Count	186.0	38.0	224.0
		% within no, yes	100.0%	100.0%	100.0%
Female	Non-cosmetic Surgery Shows	Count	47	54	101
		Expected Count	45.3	55.7	101.0
		% within no, yes	51.6%	48.2%	49.8%
	Cosmetic Surgery Show	Count	44	58	102
		Expected Count	45.7	56.3	102.0
		% within no, yes	48.4%	51.8%	50.2%
	Total	Count	91	112	203
		Expected Count	91.0	112.0	203.0
		% within no, yes	100.0%	100.0%	100.0%

Note: pair 1 = the experimental group vs. control group 1, n = 427.

male: $\chi^2 = 7.4$, $p < .01$; female: $\chi^2 = .24$, $p < .63$.

Table 16. Pair 2: Gender*Priming*Cosmetic Enhancements Crosstabulation

			Cosmetic Enhancements		
			No	Yes	Total
Male	Non-cosmetic Surgery Shows	Count	67	15	82
		Expected Count	64.5	17.5	82.0
		% within no, yes	42.1%	34.9%	40.6%
	Cosmetic Surgery Show	Count	92	28	120
		Expected Count	94.5	25.5	120.0
		% within no, yes	57.9%	65.1%	59.4%
	Total	Count	159	43	202
		Expected Count	159.0	43.0	202.0
		% within no, yes	100.0%	100.0%	100.0%
Female	Non-cosmetic Surgery Shows	Count	52	42	94
		Expected Count	46.0	48.0	94.0
		% within no, yes	54.2%	42.0%	48.0%
	Cosmetic Surgery Show	Count	44	58	102
		Expected Count	50.0	52.0	102.0
		% within no, yes	45.8%	58.0%	52.0%
	Total	Count	96	100	196
		Expected Count	96.0	100.0	196.0
		% within no, yes	100.0%	100.0%	100.0%

Note: pair 1 = the experimental group vs. control group 1, n = 427.

male: $\chi^2 = .74$, $p < .39$; female: $\chi^2 = 2.9$, $p < .09$

The results of the crosstabulation for pair 2 are listed in Table 16. The relationship between priming conditions and the desire for cosmetic surgery enhancement was not significant ($\chi^2 = .74$, $p < .39$) but revealed a similar pattern with pair 1. In pair 2, of the males who were exposed to non-cosmetic surgery reality shows, the number reporting the desire for cosmetic enhancements (n = 15) was less than expected (n = 17.5). Of the males who were exposed to cosmetic surgery reality shows, the number reporting the desire for cosmetic enhancements (n = 28) was higher than expected (n = 25.5). Similarly, priming conditions were not significantly associated with the desire for cosmetic surgery in female participants ($\chi^2 = 2.95$, $p < .09$) in pair 2 but revealed a similar pattern with pair 1. The number of female participants who were exposed to non-cosmetic surgery reality shows and expressed the desire for cosmetic enhancements (n = 42) was less than expected (n = 48). The number of female participants who were exposed to cosmetic surgery reality shows and expressed the desire for cosmetic enhancement (n = 58) was higher than expected (n = 52).

In short, the likelihood of reporting a desire for cosmetic enhancements increased as body anxiety increased. Females were more likely to express a desire for cosmetic enhancements than males. However, when we considered the influence of exposure to cosmetic surgery reality shows, the shows seemed to have a stronger effect on males. For female participants, the increase in the desire for cosmetic enhancements between the experimental group and control groups was not significant. On the other hand, for male participants, the increase in the desire for cosmetic enhancements in the experimental group was greater than those in control groups.

Summary of Findings

This chapter addressed the relations of exposure to cosmetic surgery reality shows and the perceived benefits of cosmetic surgery, surgical risks, stereotype of physically unattractive people, and power of beauty. Principal component analysis extracted five elements describing the perceived benefits of cosmetic surgery: confidence, appearance, competitiveness, happiness, and attractiveness. "Surgical risks" was obtained to describe the perceived risks of cosmetic surgery. "Disadvantages in social relations" was obtained to address the perceived stereotype for physically unattractive people. For the beliefs of beauty power, three elements were extracted: romantic relationships, job market, and social relations.

Table 17 summarizes the results from the statistical analyses. Hypothesis 1, in general, was supported. Exposure to cosmetic surgery reality shows affected viewers' perceived benefits and risks of cosmetic surgery. It also influenced viewers' perceptions of physically unattractive people in social relations and beauty power in romantic relationships and the job market. Hypothesis 2 was partial supported. For the main effect of habitual makeover viewing, only the perceived benefit of competitiveness, the perceived disadvantages of physically unattractive people in social relations, the perceived beauty power in romantic relationships were different between the experimental group and control groups. Hypothesis 3 was not supported in terms of the interaction effect of cosmetic surgery reality shows and body anxiety. Some main effects of body anxiety were found. Body anxiety increased the perceived disadvantages of physically unattractive people and the beliefs of beauty power. However, body anxiety did not influence the perceived benefits and risks of cosmetic surgery. Finally, for the prediction of the desire for

Table 17. Summary of Findings

	Pair 1	Pair 2	Control
H1a – H1d Priming Effect			
Perceived Benefit of Confidence	sig.	sig.	not sig.
Perceived Benefit of Appearance	sig.	sig.	sig.
Perceived Benefit of Competitiveness	sig.	sig.	not sig.
Perceived Benefit of Happiness	sig.	sig.	not sig.
Perceived Benefit of Attractiveness	sig.	sig.	not sig.
Perceived Surgical Risks	moderately sig.	sig.	not sig.
Disadvantages of Physically Unattractive people	Sig	sig.	not sig.
Belief of Beauty Power in Romantic Relationships	Sig	sig.	not sig.
Belief of Beauty Power in Job Market	not sig	sig.	not sig.
Belief of Beauty Power in Social Relations	not sig	not sig	sig.
H2a – H2d Habitual Makeover Show Viewing			
Perceived Benefit of Confidence	not sig	not sig	not sig.
Perceived Benefit of Appearance	not sig	not sig	not sig.
Perceived Benefit of Competitiveness	sig.	sig.	sig.
Perceived Benefit of Happiness	sig.	sig.	not sig.
Perceived Benefit of Attractiveness	not sig	not sig	not sig.
Perceived Surgical Risks	not sig	not sig	sig.
Disadvantages of Physically Unattractive people	sig.	moderately sig.	not sig.
Belief of Beauty Power in Romantic Relationships	sig.	moderately sig.	sig.
Belief of Beauty Power in Job Market	sig.	not sig	sig.
Belief of Beauty Power in Social Relations	not sig	not	not sig.
Interaction effect: Physically Unattractive People	sig.	sig.	not sig.
H3 The Effect of Body Anxiety			
Perceived Benefit of Confidence	not sig	not sig	not sig.
Perceived Benefit of Appearance	not sig	not sig	not sig.
Perceived Benefit of Competitiveness	not sig	not sig	not sig.
Perceived Benefit of Happiness	not sig	not sig	not sig.
Perceived Benefit of Attractiveness	not sig	not sig	not sig.
Perceived Surgical Risks	not sig	not sig	not sig.
Disadvantages of Physically Unattractive people	sig.	sig.	not sig.
Belief of Beauty Power in Romantic Relationships	sig.	not sig	sig.
Belief of Beauty Power in Job Market	sig.	sig.	sig.
Belief of Beauty Power in Social Relations	sig.	sig.	not sig.
Interaction effect: Physically Unattractive People	sig.	sig.	not sig.
RQ1 Priming Effect			
Desire for Cosmetic Enhancements	moderately sig.	moderately sig.	not sig.

Note: p<. 05 = “sig.”, .05 < p < .10 = “moderately sig.” p > 1.0 = “not sig.”

cosmetic enhancements, the significance level of exposure to cosmetic surgery reality shows was moderate.

CHAPTER 5

DISCUSSION AND CONCLUSION

Cosmetic surgery reality shows have been airing since 2002. Criticisms have been raised due to the shows' dramatic emphasis on the positive results of cosmetic surgery and at the same time, the neglect of the risks of surgery. Little empirical research directly investigates the relationship between the viewing of cosmetic surgery reality shows and the perceptions of cosmetic surgery. Thus, the primary aim of this study was to examine the effects of exposure to cosmetic surgery reality shows on the perceptions of cosmetic surgery. Additionally, via employing an experiment design, this study attempted to provide empirical evidence to demonstrate a causal relation between the viewing of cosmetic surgery reality shows and the effects on perceptions.

Three sets of independent variables were examined in this study, including demographic variables, television viewing habits, and priming (one-shot exposure to cosmetic surgery reality shows). The priming effects of cosmetic surgery reality shows were supported by this study. Cosmetic surgery reality shows were found to enhance the perceived benefits of cosmetic surgery and at the same time, lower the risks of cosmetic surgery. In addition, viewers' perceptions of beauty power and stereotypes of physically unattractive were affected by cosmetic surgery reality shows. This study found that gender was another strong factor that influenced the perceptions of cosmetic surgery reality shows and the desire for cosmetic enhancements. Women were more likely to have the intent to cosmetic enhancement; however, men were more likely to endorse the power of beauty and perceived greater benefits and lower risks of cosmetic surgery. The habitual viewing of makeover shows appeared to have more profound effects on the

perceived privileges of beauty. The detailed discussion of the results and crucial factors is provided below.

The Effects of Demographic Variables

Four demographic variables were measured and analyzed in the present study: gender, ethnicity, hometown, and age. Hometown and age were not related to the perceptions of cosmetic surgery, and physically unattractive people, and the privileges of being beautiful. It is not surprising that age had no effect in this study since the age distribution of this sample concentrated on 18-21 years old. With regard to hometown origin, one prevalent lay hypothesis is that people in urban areas view cosmetic surgery as more common than those in rural areas and are more willing to undergo cosmetic surgery. However, in this study, there were no differences in the perceptions of cosmetic surgery, physically unattractive people, and the power of beauty among urban, suburban, and rural areas.

Some small effects were associated with ethnicity, but the results were not consistent. Cultural studies scholars have articulated that, if we look at the choices of cosmetic surgery procedures among different ethnicities, we would realize that cosmetic surgery is not only a gender issue but a race issue (Haiken, 1997). For example, for African Americans and Jewish Americans, procedures that make the nose smaller and more slender are most common. For Asian Americans, eyelid surgeries to make the eyes appear bigger are the most popular (Haiken, 1997; ASPS, 2009). The lack of consistent findings in this study suggests that, even though the choices of cosmetic surgery procedures might differ, the perceived functions and benefits of cosmetic surgery might be similar among all ethnicities.

One of the interesting findings of this study is that ethnicity was found not to be significantly related to the likelihood of pursuing cosmetic enhancements. Previous research has suggested that ethnic minorities, especially African Americans, experience less body dissatisfaction and have less of a desire for cosmetic surgery (Delinsky, 2005; Rucker & Cash, 1992). More recent research, however, is showing a change regarding ethnicity and body dissatisfaction. For instance, in the Caldwell, Brownell, and Wilfley (1997) study, no differences in body dissatisfaction were found among African American women and white women after controlling for BMI, income, and marital status. The popularity of cosmetic surgery also has apparently reduced the taboo of cosmetic surgery. Ethnic patients have been increasingly growing in recent years (ASAP, 2009). Therefore, the finding in this study that the desire for cosmetic surgery enhancements did not differ according to ethnicity suggests that ethnic minority groups are more aware and accepting of cosmetic surgery.

Of the demographic variables, gender was the strongest factor that affected perceptions of cosmetic surgery and beauty power. First, more female participants than male participants reported the intent to undergo cosmetic enhancements; men, however, perceived lower surgical risks of cosmetic surgery than did women. Two plausible explanations exist. First, women are usually inundated with cosmetic surgery information which leads them to be more informed of the risks of cosmetic surgery than men. Second, men are thought to be risk takers more so than women and therefore might not consider risk in the same way as women do (e.g., Gustafson, 1998; Bord & O'Connor, 1997; Garbarino & Strahilevitz, 2004). An interesting twist of the perceived risks of cosmetic surgery and the desire for undergoing cosmetic enhancements emerged in this study. Women perceived higher risks of cosmetic surgery and lower beauty

power, but still expressed a stronger desire for cosmetic enhancements. This finding coincides with the feminist view regarding the issues of body image and cosmetic surgery. The pressure to reach the norms of beauty is so overwhelming that women neglect possible risks associated with cosmetic surgery (Gimlin, 2002; Wolf, 1991). Perhaps, for women, cosmetic enhancements are not the means to gain power, but a method to stay in the game.

In addition, men tended to think that physically unattractive people had more disadvantages in social relations and that good-looking people had advantages in romantic relationships, social relations, and in the job market. At first glace, these findings seem to conflict with the common knowledge about gender differences in attitudes toward appearance. In our common knowledge, women are more conscious about appearance because they believe the importance of appearance. Men usually do not put forth tremendous efforts to improve appearance because they have fewer concerns about appearance. However, when considering the relationship between gender and the beliefs of beauty power, it is not surprising that men endorse the power of beauty since men are more likely to evaluate women by appearance rather than by personality (Wolf, 1991). Feminists argue that cosmetic surgery is a gender issue since women are undergoing cosmetic surgery while living under a patriarchic system in which women are valued and rewarded by their appearance and sexuality. This study's finding that men rather than women were more likely to endorse the power of beauty ironically explains the reason why the majority of the cosmetic surgery seekers were women.

The Effects of Cosmetic Surgery Experience

Cosmetic surgery experience in general had no effects on the perceived benefits and risks of cosmetic surgery and the perceptions regarding beauty. The primary reason perhaps is because

few people in this study had undergone cosmetic surgery. There were six participants who had cosmetic surgery experience in control group 1, four participants in control group 2, and five participants in the experimental group. However, it was still worth looking at the possible significant effects of cosmetic surgery experience on the perceptions of cosmetic surgery and beauty power. For the perceived benefits of cosmetic surgery, cosmetic surgery experience was found to negatively predict "confidence" in pair 1. For the perceived beauty power, cosmetic surgery experience negatively predicted "romance" in pair 2. In addition, all of coefficients in the regression models, including those that were non-significant, were negative, which suggests that those who had cosmetic surgery experience were not more likely to endorse cosmetic surgery. In cosmetic surgery practice, cosmetic surgery is marketed and sold as a means to improve appearance, confidence, and/or qualities of life. The findings of this study place doubt on the above arguments. In contradiction, cosmetic surgery experience resulted in inverse effects. The reason for this finding is not clear due to the sample size of those who had cosmetic surgery experience in this study. Future studies in the effects of makeover media on cosmetic surgery patients and non-patients are desirable.

The Effects of Body Anxiety

Body anxiety was found to affect beliefs about physically unattractive people, beauty power, and the desire for cosmetic enhancements, but had no effects on the perceived benefits and risks of cosmetic surgery. A considerable amount of research has suggested that cosmetic surgery patients either had greater body dissatisfactions or felt dissatisfied with a specific body feature and thus had a desire for undergoing cosmetic surgery (e.g., Didie and Sarwer, 2003; Sarwer, Wadden, Pertschunk, & Whitaker, 1998). Darisi's et al. (2005) study described the

expected benefits of cosmetic surgery from prospective patients including improved appearance, confidence, attractiveness, and career. Based on that study, it seemed reasonable to make a linear relationship assumption about body anxiety, the perceived benefits of cosmetic surgery, and the desire for cosmetic enhancements. However, this present study found that body anxiety was not associated with the perceived benefits and risks of cosmetic surgery. Perceived benefits of cosmetic surgery were not exaggerated by body anxiety and perceived surgical risks were not reduced by the level of body anxiety.

On the other hand, body anxiety was found to positively predict the endorsement of beauty power, the perceived disadvantages about physically unattractive people and the desire for cosmetic enhancements. Given the above findings regarding body anxiety, it might be reasonable to argue that the desire for cosmetic enhancements is more driven by the beliefs of beauty power and perceived disadvantages of physically unattractive people rather than the perceived benefits of cosmetic surgery.

One of the more striking findings of this study was that body anxiety, unexpectedly, did not moderate the effect of exposure to cosmetic surgery reality shows. Priming theory has found that individual differences in terms of characteristics or preferences moderate the magnitude of priming effects. For instance, trait aggressiveness influenced viewers' aggressive affect after exposure to violent videos (e.g., Bushman, 1995; Josephosen, 1987). A considerable amount of body image research has also suggested a causal relation between exposure to thin-ideal images and body dissatisfactions, and the link between body dissatisfactions and cosmetic surgery seekers. Despite the fact that the relation between exposure to thin-ideal images and body anxiety is well-documented, few studies have focused on the moderating role of body

dissatisfaction in the effect of exposure to thin-ideal images. Henderson-King and Henderson-King (1997) found that the effect of exposure to thin-ideal images on women's body esteem was moderated by individual weight concern and a self-monitoring trait. High in either weight concern or self-monitoring facilitated the negative effect of thin-ideal image on women's body esteem. Mazzeo's et al. (2006) experimental study found that the magnitude of exposure to cosmetic surgery reality shows was moderated by thin-ideal internalization. Johnasson et al. (2005), however, demonstrated a different finding. The finding in Johnasson's et al. (2005) supported the main effect of body dissatisfaction on the negative consequences of exposure to thin-ideal images, but no differences in high body dissatisfaction appeared between the experimental group and the control group, which indicated no interaction effects existed in body dissatisfaction and thin-ideal image exposure. The lack of a significant interaction effect found in this study is congruent with Johanasson's et al (2005) findings and suggests that viewers high in body anxiety are not necessarily more vulnerable to cosmetic surgery reality shows.

The Effects of Habitual Viewing of Makeover Shows

Habitual makeover show viewing was found to increase the perceived benefits of competitiveness in the job market and happiness in life, but showed no effects on the perceived benefits of cosmetic surgery in terms of appearance, attractiveness, and confidence. Also, habitual viewing did not affect the perceived risks of cosmetic surgery. In short, the effect of habitual viewing on the perceived benefits of cosmetic surgery reality shows was not comprehensive. Although dramatic changes of appearance and notions of a confidence boost after surgery are usually emphasized in the shows, while surgical risks are trivialized, viewers' perceptions of cosmetic surgery do not appear to be influenced by the shows' storylines. Nabi's

(2009) study also revealed no association between the perceived risks and the viewing of cosmetic surgery reality shows. Nabi's and this present study's findings resonated with Hall's (1991) theory about active audiences who might disagree with media messages and not necessarily interpret the media messages as the way they were encoded.

It is important to note that habitual makeover show viewing had more profound effects on perceptions of physically unattractive people and beauty power. An interaction effect was found in exposure to cosmetic surgery reality shows and habitual makeover viewing. For habitual viewers, the priming effect of cosmetic surgery reality shows was greater on the perceived disadvantages of physically unattractive people. Habitual viewers also believed that good-looking people were more privileged in romantic relationships and in the job market. However, the amount of makeover show viewing did not significantly predict the desire for cosmetic enhancements.

The media have long favored physically attractive people and at the same time have presented physically unattractive people in negative ways, which contributes to stereotyping physically unattractive people and reinforcing the merits of being young and attractive. For example, in Bazzini, McIntosh, Smith, Cook, and Harris's (1997) study of the representation of aged women in popular films from the 1940s to 1980s, they found that older people, especially older women, were not only underrepresented, but worse, in comparison to the young characters, were portrayed as less friendly, less romantically involved, and less likely to experience positive outcomes at a movie's conclusion. Davis also (1990) found that television women apparently lose their utility after age 35.

Additionally, Fouts and Burggraf's (1999) study demonstrated a weight stereotype commonly exhibited in popular sitcoms. Thinner female characters received more positive body-related messages than did heavier female characters. Harrison's (2000) study demonstrated that television viewing influenced boys' stereotyping of fat girls - less nice, smart, clean, honest, and have fewer friends. Indeed, when we consider the media's portrayals of beauty and the effects found about habitual makeover viewing together, it is not surprising that the effect of makeover shows was neither an exaggeration of the notions of the benefits of cosmetic surgery nor a direct trigger to undergo cosmetic surgery, but rather a celebration of the power of beauty.

The Effects of Exposure to Cosmetic Surgery Reality Shows

The present study found strong and assimilative priming effects. After being primed with cosmetic surgery reality shows, viewers perceived greater benefits of cosmetic surgery in terms of competitiveness, confidence, appearance, happiness, and attractiveness. They also perceived lower surgical risks and perceived good-looking people as more privileged in romantic relationships and in the job market. Meanwhile, physically unattractive people were considered as being disadvantaged in social relations. These findings are congruent with the majority of the findings in priming research that has demonstrated a robust effect of recent priming. In this study, viewers' judgments and evaluations were affected by the constructs that were activated by the priming stimuli. A 25-minute video clip that portrayed the benefits of cosmetic surgery and being beautiful affected viewers' evaluations and judgments about cosmetic surgery and beauty.

Although the levels of significance of exposure to cosmetic surgery reality shows were merely close to .05, the contrasts of pair 1, pair 2 and control groups together demonstrated a positive relation between exposure to cosmetic surgery reality shows and the intent to undergo

cosmetic enhancements. This finding is the first empirical evidence, at least to my knowledge, that suggests a causal relation between cosmetic surgery reality shows and the desire for cosmetic enhancements.

It is worth mentioning again that habitual makeover show viewing did not affect the perceived benefits and risks of cosmetic surgery. Also, habitual makeover show viewing did not affect the desire for cosmetic enhancements. The differences between the priming effect of cosmetic surgery reality shows and habitual makeover viewing indicate the effects of recent exposure to cosmetic surgery reality shows is somewhat transient for some specific effects, such as the perceived benefits and risks of cosmetic surgery. Stereotyping physically unattractive people and endorsing beauty power appear to be more permanent. Such stereotyping appears to get stronger as the amount of makeover show viewing increases. Priming theory assumes the effect of recent priming is more transient, but the influence of chronical priming is more profound. In this study, the differences found between a recent exposure to cosmetic surgery reality shows and habitual makeover shows viewing were congruent with priming research. The constructs related to the benefits and risks of cosmetic surgery were merely activated by the cosmetic surgery reality shows but the constructs of beauty appeared to be ingrained in memory. Given this finding, it is fair to argue that cosmetic surgery reality shows indeed are members of "female socialization television" (Gailley, 2007), which reinforces the values of beauty.

In short, this study has provided empirical evidence with regard to cognitive and even behavioral effects of cosmetic surgery reality shows. Taking the findings together, it can perhaps be argued that the influence of cosmetic surgery reality shows on viewers' desire for cosmetic enhancements was not driven by presentations of the benefits of cosmetic surgery, but rather by

notions of beauty power and stereotyping physically unattractive people. In cosmetic surgery reality shows, physically unattractive people are portrayed as being disadvantaged in romantic relationships, careers, and/or social relations. In the reveals that take place after surgeries are performed, the power of cosmetic surgery is shown to be not only in the improvement of appearance, but in the link between beauty and the social privileges of being a beauty.

This study also provided empirical evidence regarding gender and priming effects. Even though more females than males expressed their desire for cosmetic enhancements, the priming effect of cosmetic surgery reality shows was stronger among males; the desire for cosmetic enhancements for males significantly increased after exposure to cosmetic surgery reality shows. It might be too bold to say that cosmetic surgery reality shows can successfully reach male clients. However, the significant increase in the desire for cosmetic enhancements among males suggests that cosmetic surgery is no longer limited to females only. More men might now be jumping into the pursuit of ideal bodies. How male audiences consume makeover messages and what impact these makeover messages are having on men is worth further study.

Limitations

Several limitations of this study should be addressed. First, the sample of this study was college students, which is not representative of the general population. The lack of demographic diversity in the sample reduces the reliability of generalization. Also, this study was not able to exercise a completed randomization. Due to varying class schedules, subjects were allowed to choose one of six experimental sessions on their own, which not only caused unequal sample sizes for each experimental group but also reduced the internal validity.

Another limitation is related to the methodology of the experiment. The viewing environment, the viewing context, and the way of viewing were different from normal viewing situations (e.g., viewing in the living room). Even though the subjects were advised to relax and watch the video as if they were at home, the experimental setting of this study might have generated different watching strategies. For instance, in the experimental session, subjects might have paid more attention to the programs they were watching since they knew that there was a follow-up questionnaire to fill in. Also, subjects might have stayed until the programs finished, although they normally would not have done so. In other words, the artificial environment might have affected the reliability of this study.

In addition, due to time limits, three cosmetic surgery stories were edited into a 25-minute video and presented to the subjects. The storylines had, in effect, become more intense than the original programs that featured two cosmetic surgery stories in a one-hour episode. In short, due to the nature of the experiment design, the lack of representative sample, and a shorten version of the cosmetic surgery reality shows, the generalization of this study was limited.

Future Studies

The findings of this study contributed to the understanding of the effects of cosmetic surgery shows and broadened the scope of media priming research to makeover messages and the constructs of beauty. However, more research on the topic of makeover media needs to be conducted to establish a better understanding with regard to the extent and the limits of the effects.

In terms of the magnitude of the effects of makeover media, this study demonstrates that priming effects can be somewhat transient. The duration of the effects of makeover media is

noteworthy for further research. It would also be interesting to explore and examine the individual factors in the role of the effects of makeover media. Body anxiety was found to have no effects in this study; however, it is premature at this stage to exclude body anxiety in makeover media research. Further projects using the Social Physique Anxiety Scale or other scales should be done to repeatedly examine the influence of body anxiety. Also, other individual factors, such as material values and the internalization of beauty, should be examined to provide a better understanding about the magnitude of the effects of makeover media. Meanwhile, as noted previously, gender differences, in particular the effects of exposure to makeover media on men' attitudes toward cosmetic enhancements, is worthy of further study.

Another important issue that should be addressed is the potential confounding factors that mediated the effects of media exposure. For instance, viewing motivations and viewing involvements were found to greatly affect the magnitude of media effects (e.g, Perse, 1990; Rubin, 1981). The future research could include the estimates of viewing style, viewing motives, and viewing involvements to clarify the effects of cosmetic surgery reality shows.

Finally, different methodologies should be employed to provide more comprehensive findings. For instance, a survey method with a longitudinal data collection design that includes a wider range of subjects not only would increase research reliability but also would provide insights into how viewers' attitudes toward makeover media change over time.

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APPENDICES

Appendix A: Questionnaire

Section A: For answering following questions, please do your best to recall your average TV viewing hours and minutes.

1 On average, how long do you watch TV **per day?**

_____hours and _____minutes

2 How long do you watch beauty makeover or fashion related reality shows during **the average week**? (makeover or fashion shows refer to the show that introduce a transformation of something related appearance or fashion clothing, hairstyle, makeup, or surgical procedures, e.g. *What Not to Wear, How Do I Look, Dr. 90210, How to Look Good Naked, Fashion Police*…etc.)

_____hours and _____minutes

3 How long do you watch non-fashion or non-makeover reality shows during **the average week** (Note: reality shows refer to shows that feature real people in unscripted scenarios, e.g. *Cops, The Real World, America's Got Talents, Survivor…etc*.)?

_____hours and _____minutes

Section B: Each of following questions relate to your thoughts about appearance. Please indicate how much you agree or disagree with the statement by placing an X on the appropriate line.

4 People who are not considered physically attractive have fewer opportunities to engage in romantic relationships.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

5 People who are not considered physically attractive have fewer opportunities in the job market.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

6 People who are not considered physically attractive are more isolated in their social lives.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

7 Physically attractive people have advantages in romantic relationships.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

8 Physically attractive people have advantages in the job market.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

9 Physically attractive people have advantages in their social lives.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

Section C: Each of following questions relate to your thoughts of your body. Please do your best to indicate the degree to which each of these questions apply to your own experiences by placing an X on the appropriate line.

10 I am comfortable with the appearance of my physique/figure.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

11 I would never worry about wearing clothes that might make me look too thin or overweight.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

12 I wish I wasn't so uptight about my physique/figure.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

13 There are times when I am bothered by thoughts that other people are evaluating my weight or muscular development negatively.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

14 When I look in the mirror I feel good about my physique/figure.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

15 Unattractive features of my physique/figure make me nervous in certain social settings.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

16 In the presence of others, I feel apprehensive about my physique/figure.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

17 I am comfortable with how fit my body appears to others.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree

1 2 3 4 5 6 7

18 It would make me uncomfortable to know others were evaluating my physique/figure.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree

1 2 3 4 5 6 7

19 When it come s to displaying my physique/figure to others, I am a shy person.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree

1 2 3 4 5 6 7

20 I usually feel relaxed when it is obvious that others are looking at my physique/figure.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree

1 2 3 4 5 6 7

21 When in a bathing suit, I often feel nervous about the shape of my body.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree

1 2 3 4 5 6 7

Section D: Each of following questions relate to your thoughts about cosmetic surgery (cosmetic surgery refers to surgery that is designed to improve appearance, e.g. eye lift, breast augmentation). Please indicate how much you agree or disagree with the statement by placing an X on the appropriate line.

22 Cosmetic surgery can help people to become more social.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree

1 2 3 4 5 6 7

23 I do not think people can enhance their confidence through cosmetic surgery.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree

1 2 3 4 5 6 7

24 Cosmetic surgery can help people become more competitive in the job market.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree

1 2 3 4 5 6 7

25 Cosmetic surgery is not an effective means to improve appearance.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree

1 2 3 4 5 6 7

26 People can have a more attractive face or body through cosmetic surgery.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

27 Cosmetic surgery can help people have a better relationship with their partner.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

28 Risks associated with Cosmetic surgery are minor.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

29 Major complications after cosmetic surgery are rare.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

30 After cosmetic surgery, patients would be happier.

Strongly Disagree ____ ____ ____ ____ ____ ____ ____ Strongly Agree
1 2 3 4 5 6 7

Section E: Following questions are related to your demographic information and your experiences about Cosmetic surgery. Please circle or place an X on the appropriate line.

31 Have you ever undergone cosmetic surgery?

(1) yes (2) no

32 Which of the following describes your thought concerning cosmetic surgery (check all that apply)?

_____ (1) I would never pursue cosmetic surgery.

_____ (2) I might undergo non-surgical cosmetic procedures (ex. Botox and Chemical peels) to improve my appearance/figure in the future.

_____ (3) I might undergo surgical cosmetic procedures (ex. Breast argumentation and Nose reshaping) to improve my appearance/figure in the future.

_____ (4) I have had cosmetic surgery and would do so again.

33 What is your gender?

(1) male (2) female

34 Which of the following describes your hometown?

(1) urban (2) suburban (3) rural

35 What is your race / ethnicity

(1) White (2) Black or African American (3) Hispanic or Latino
(4) American Indian or Alaska Native (5) Native Hawaiian or Other Pacific Islander
(6) Asian (7) Middle Eastern (8) Other_____

36 What is your marital status?

(1) single (2) married

37 Do you have a boyfriend or girlfriend?

(1) yes (2) no

38 What is your age? _____ years old

Thank You!

Appendix B: MANOVA Test on the Characteristics of Participants within Groups

Expected Mean Squares Section

Source Term	**DF**	**Term Fixed?**	**Denominator Term**	**Expected Square**
A: Group	2	Yes	S(A)	S+sA
S(A)	600	No		S

Note: Expected Mean Squares are for the balanced cell-frequency case.

MANOVA Tests Section

Term(DF) Test Statistic A(2):Group	Test Value	DF1	DF2	F-Ratio	Prob Level	Decision (0.05)
Wilks' Lambda	0.97	22	1180	0.70	0.84	Accept
Hotelling-Lawley Trace	0.03	22	1178	0.70	0.84	Accept
Pillai's Trace	0.03	22	1182	0.70	0.84	Accept
Roy's Largest Root	0.01	11	591	0.75	0.69	Accept
TV	387.85	2	600	0.05	0.95	Accept
Makeover Show	1622.47	2	600	0.26	0.77	Accept
Non-makeover Show	9319.51	2	600	0.23	0.79	Accept
Cosmetic Surgery Exp.	0.00	2	600	0.12	0.88	Accept
Gender	0.27	2	600	1.09	0.34	Accept
Hometown	0.24	2	600	0.59	0.55	Accept
Ethnicity	0.99	2	600	0.78	0.46	Accept
Marital	0.04	2	600	2.14	0.12	Accept
Boy/Girlfriend	0.07	2	600	0.26	0.77	Accept
Age	16.71	2	600	1.96	0.14	Accept
Physique Anxiety Scale	45.14	2	600	0.29	0.75	Accept

Appendix C: PCA on the Stereotypes of Physically Unattractive People and Beliefs of the Power of Beauty (Robust, Varimax Rotation)

Eigenvalues after Varimax Rotation

No.	Eigenvalue	Individual Percent	Cumulative Percent	Scree Plot
1	1.30	21.69	21.69	|||||
2	1.39	23.16	44.85	|||||
3	1.65	27.45	72.30	||||||
4	1.13	18.88	91.18	||||
5	0.31	5.09	96.27	||
6	0.22	3.73	100.00	|

Factor Loadings after Varimax Rotation

Variables	Factor 1	Factor 2	Factor 3	Factor 4
1	-0.87	-0.24	0.11	-0.30
2	-0.24	-0.90	0.09	-0.26
3	-0.25	-0.21	0.22	-0.89
4	-0.64	-0.06	0.69	-0.04
5	-0.06	-0.67	0.67	-0.03
6	-0.13	-0.15	0.81	-0.43

Note:
Variable 1: People who are not considered physically attractive have fewer opportunities to engage in romantic relationships.

Variable 2 People who are not considered physically attractive have fewer opportunities in job market.

Variable 3: People who are not considered physically attractive are more isolated in their social lives.

Variable 4: Physically attractive people have advantages in romantic relationships.

Variable 5: Physically attractive people have advantages in the job market.

Variable 6: Physically attractive people have advantages in their social lives.

Appendix D: PCA on the Perceived Benefits and Risks of Cosmetic Surgery (Robust, Varimax Rotation)

Eigenvalues after Varimax Rotation

No.	Eigenvalue	Individual Percent	Cumulative Percent	Scree Plot
1	1.20	13.33	13.33	|||
2	1.65	18.30	31.64	||||
3	1.01	11.23	42.86	|||
4	1.33	14.74	57.60	|||
5	1.51	16.79	74.39	||||
6	1.12	12.48	86.87	|||
7	0.44	4.86	91.73	|
8	0.38	4.25	95.98	|
9	0.36	4.02	100.00	|

Factor Loadings after Varimax Rotation

Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
1	-0.44	0.12	-0.05	0.56	-0.30	-0.34
2	-0.94	0.00	-0.07	0.11	-0.16	-0.14
3	-0.06	0.07	-0.08	0.92	-0.21	-0.09
4	-0.07	0.02	-0.98	0.08	-0.10	-0.11
5	-0.18	0.05	-0.14	0.17	-0.25	-0.89
6	-0.08	0.10	-0.11	0.30	-0.85	-0.09
7	-0.06	0.89	-0.01	0.03	-0.17	0.09
8	0.03	0.88	-0.02	0.09	-0.08	-0.19
9	-0.24	0.25	-0.04	0.10	-0.72	-0.33

Note:
Variable 1: Cosmetic surgery can help people to become more social.
Variable 2: I do not think people can enhance their confidence through cosmetic surgery.
Variable 3: Cosmetic surgery can help people become more competitive in the job market.
Variable 4: Cosmetic surgery is not an effective means to improve appearance.
Variable 5: People can have a more attractive face or body through cosmetic surgery.
Variable 6: Cosmetic surgery can help people have a better relationship with their partner.
Variable 7: Risks associated with cosmetic surgery are minor.
Variable 8: Major complications after cosmetic surgery are rare.
Variable 9: After cosmetic surgery, patients would be happier.

Appendix E: PCA Validation on the Perceived Benefits and Risks of Cosmetic Surgery (Robust, Varimax Rotation)

Training Sample

Eigenvalues after Varimax Rotation

No.	Eigenvalue	Individual Percent	Cumulative Percent	Scree Plot
1	1.50	25.04	25.04	||||||
2	1.40	23.28	48.32	|||||
3	1.38	23.07	71.39	|||||
4	1.17	19.57	90.96	||||
5	0.33	5.51	96.47	||
6	0.21	3.53	100.00	|

Factor Loadings after Varimax Rotation

Variables	Factor 1	Factor 2	Factor 3	Factor 4
1	-0.09	0.27	0.86	-0.28
2	-0.06	0.89	0.26	-0.27
3	-0.21	0.22	0.23	-0.89
4	-0.62	0.07	0.68	-0.07
5	-0.67	0.69	0.07	-0.02
6	-0.78	0.11	0.21	-0.47

Note:
Variable 1: People who are not considered physically attractive have fewer opportunities to engage in romantic relationships.

Variable 2 People who are not considered physically attractive have fewer opportunities in job market.

Variable 3: People who are not considered physically attractive are more isolated in their social lives.

Variable 4: Physically attractive people have advantages in romantic relationships.

Variable 5: Physically attractive people have advantages in the job market.

Variable 6: Physically attractive people have advantages in their social lives.

Holdout Sample

Eigenvalues after Varimax Rotation

No.	Eigenvalue	Individual Percent	Cumulative Percent	Scree Plot
1	1.796780	29.95	29.95	||||||
2	1.254352	20.91	50.85	|||||
3	1.355588	22.59	73.45	|||||
4	1.100887	18.35	91.79	||||
5	0.278409	4.64	96.43	|
6	0.213984	3.57	100.00	|

Factor Loadings after Varimax Rotation

Variables	Factor 1	Factor 2	Factor 3	Factor 4
1	-0.11	0.87	0.23	-0.32
2	-0.13	0.20	0.91	-0.23
3	-0.21	0.28	0.21	-0.89
4	-0.72	0.60	0.03	-0.03
5	-0.70	0.07	0.63	-0.04
6	-0.84	0.07	0.19	-0.40

Note:

Variable 1: People who are not considered physically attractive have fewer opportunities to engage in romantic relationships.

Variable 2 People who are not considered physically attractive have fewer opportunities in job market.

Variable 3: People who are not considered physically attractive are more isolated in their social lives.

Variable 4: Physically attractive people have advantages in romantic relationships.

Variable 5: Physically attractive people have advantages in the job market.

Variable 6: Physically attractive people have advantages in their social lives.

Appendix F: PCA Validation on the Stereotypes of Physically Unattractive People and Beliefs of the Power of Beauty (Robust, Varimax Rotation)

Training Sample

Eigenvalues after Varimax Rotation

No.	Eigenvalue	Individual Percent	Cumulative Percent	Scree Plot
1	1.32	14.62	14.62	|||
2	1.69	18.77	33.39	||||
3	1.01	11.20	44.58	|||
4	1.15	12.79	57.37	|||
5	1.13	12.60	69.96	|||
6	1.51	16.82	86.79	||||
7	0.45	5.03	91.82	||
8	0.42	4.64	96.46		
9	0.32	3.54	100.00		

Factor Loadings after Varimax Rotation

Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
1	-0.56	0.15	-0.03	-0.41	-0.38	-0.28
2	-0.08	-0.04	0.07	-0.95	-0.13	-0.14
3	-0.91	0.03	0.09	-0.03	-0.03	-0.23
4	-0.08	-0.01	0.98	-0.06	-0.10	-0.11
5	-0.10	0.04	0.13	-0.16	-0.91	-0.25
6	-0.36	0.01	0.10	-0.06	-0.11	-0.80
7	0.01	0.90	-0.03	-0.05	0.11	-0.18
8	-0.09	0.89	0.02	0.07	-0.18	-0.02
9	-0.10	0.24	0.07	-0.20	-0.27	-0.78

Holdout Sample

Eigenvalues after Varimax Rotation

No.	Eigenvalue	Individual Percent	Cumulative Percent	Scree Plot
1	1.27	14.06	14.06	|||
2	1.65	18.36	32.42	||||
3	1.03	11.43	43.86	|||
4	1.39	15.42	59.28	||||
5	1.43	15.88	75.16	||||
6	1.11	12.36	87.52	|||
7	0.44	4.89	92.41		
8	0.38	4.26	96.67		
9	0.30	3.33	100.00		

Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
1	-0.46	-0.07	0.15	0.58	0.33	-0.29
2	-0.93	-0.04	0.07	0.15	0.16	-0.16
3	-0.10	-0.12	0.06	0.93	0.18	-0.15
4	-0.08	-0.07	0.98	0.09	0.09	-0.13
5	-0.20	-0.06	0.17	0.26	0.23	-0.87
6	-0.11	-0.21	0.11	0.27	0.86	-0.11
7	-0.06	-0.88	0.08	0.08	0.15	0.08
8	-0.02	-0.85	0.01	0.07	0.16	-0.19
9	-0.33	-0.28	0.03	0.10	0.64	-0.40

Appendix G: Hotelling's T^2 Test on Contrasts

Experimental Group vs. Control Group 1

Hotelling's T2 Test Section

Covariance Assumption	T2	DF1	DF2	Parametric Test Prob Level	Randomization Test Prob Level
Equal	78.548	10	425.0	0.0000	0.0010
Unequal		10			1.0000

The randomization test results are based on 1000 Monte Carlo samples.

Experimental Group vs. Control Group 2

Hotelling's T2 Test Section

Covariance Assumption	T2	DF1	DF2	Parametric Test Prob Level	Randomization Test Prob Level
Equal	157.946	10	396.0	0.0000	0.0010
Unequal		10			1.0000

The randomization test results are based on 1000 Monte Carlo samples.

Control Group 1 vs. Control Group 2

Hotelling's T2 Test Section

Covariance Assumption	T2	DF1	DF2	Parametric Test Prob Level	Randomization Test Prob Level
Equal	37.310	10	379.0	0.0001	0.0010
Unequal		10			1.0000

The randomization test results are based on 1000 Monte Carlo samples.

Appendix H: Completed Version of Hierarchical Multiple Regression Table H1 – H13

Table H1. Hierarchical Linear Regression on Perceived Benefit regarding Confidence

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Demographics						
Cosmetic Surgery	-1.13	-0.16	0.55	0.60	-0.1*	-0.01
Gender	0.03	0.00	0.20	0.19	0.01	0
Ethnicity	-0.18	-0.23	0.18	0.18	-0.05	-0.06
Romantic Relationship	-0.05	0.05	0.17	0.18	0.05	0.05
Hometown	0.16	0.11	0.14	0.14	0.06	0.04
Age	0.03	0.00	0.03	0.03	0.04	0
Body Anxiety	-0.01	-0.01	0.01	0.01	0.05	0.08
Step 2 TV						
Cosmetic Surgery	-1.10	-0.02	0.55	0.61	-0.1*	0
Gender	-0.10	-0.10	0.21	0.20	-0.03	-0.03
Ethnicity	-0.15	-0.21	0.18	0.18	-0.04	-0.06
Romantic Relationship	0.16	0.17	0.17	0.18	0.04	0.05
Hometown	0.16	0.12	0.14	0.14	0.06	0.04
Age	0.03	0.00	0.03	0.03	0.05	0
Body Anxiety	-0.01	-0.01	0.01	0.01	0.05	0.07
TV	0.00	0.00	0.00	0.00	-0.04	-0.05
Makeover	0.00	0.00	0.00	0.00	0.08	0.08
Step 3 Priming						
Cosmetic Surgery	-1.13	-0.05	0.54	0.60	-0.1*	0
Gender	-0.07	-0.05	0.21	0.20	-0.02	-0.01
Ethnicity	-0.13	-0.17	0.18	0.18	-0.04	-0.05
Romantic Relationship	0.14	0.17	0.17	0.18	0.04	0.05
Hometown	0.16	0.14	0.14	0.14	0.05	0.05
Age	0.02	0.00	0.03	0.03	0.03	0
Body Anxiety	-0.01	-0.01	0.01	0.01	0.05	0.07
TV	0.00	0.00	0.00	0.00	-0.04	-0.05
Makeover	0.00	0.00	0.00	0.00	0.07	0.07
Priming/Neutral	0.57	0.61	0.17	0.18	0.16**	0.17**

Note: Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.02 for Step 1, ΔR^2 =.005 for Step 2, ΔR^2 = .03 for Step 3.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.01 for Step 1, , ΔR^2 =.01 for Step 2, ΔR^2 = .03 for Step 3.
*p < .05, **p < .01, ***p < .001.

Table H2. Hierarchical Linear Regression on Perceived Benefit regarding Appearance

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Demographics						
Cosmetic Surgery	-0.91	0.53	0.49	0.60	-0.09	0.04
Gender	0.13	-0.16	0.18	0.19	0.04	-0.04
Ethnicity	-0.02	0.24	0.16	0.18	-0.01	0.07
Romantic Relationship	0.04	-0.04	0.16	0.18	0.04	-0.04
Hometown	0.06	0.06	0.13	0.14	0.02	0.02
Age	0.02	0.00	0.03	0.03	0.04	0
Body Anxiety	0.01	0.00	0.01	0.01	0.05	0.02
Step 2 TV						
Cosmetic Surgery	-0.92	0.60	0.49	0.61	-0.09	0.05
Gender	0.04	-0.21	0.19	0.20	0.01	-0.06
Ethnicity	-0.01	0.25	0.16	0.18	0	0.07
Romantic Relationship	0.11	-0.15	0.16	0.18	0.03	-0.04
Hometown	0.06	0.06	0.13	0.14	0.02	0.02
Age	0.02	0.00	0.03	0.03	0.04	0.01
Body Anxiety	0.01	0.00	0.01	0.01	0.06	0.02
TV	0.00	0.00	0.00	0.00	0.02	-0.02
Makeover	0.00	0.00	0.00	0.00	0.08	0.04
Step 3 Priming						
Cosmetic Surgery	-0.95	0.53	0.48	0.55	-0.09	0.05
Gender	0.07	-0.07	0.19	0.19	0.02	-0.02
Ethnicity	0.01	0.33	0.16	0.16	0	0.1*
Romantic Relationship	0.09	-0.16	0.15	0.16	0.03	-0.04
Hometown	0.05	0.11	0.13	0.13	0.02	0.04
Age	0.01	-0.01	0.03	0.02	0.02	-0.01
Body Anxiety	0.01	0.00	0.01	0.01	0.06	0.02
TV	0.00	0.00	0.00	0.00	0.02	-0.02
Makeover	0.00	0.00	0.00	0.00	0.07	0.01
Priming/Neutral	0.60	1.49	0.15	0.16	0.19***	0.42***

Note: Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.02 for Step 1, ΔR^2 =.01 for Step 2, ΔR^2 = .03 for Step 3.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.01 for Step 1, ΔR^2 =.002 for Step 2, ΔR^2 = .18 for Step 3.
*p < .05, **p < .01, ***p < .001.

Table H3. Hierarchical Linear Regression on Perceived Benefit regarding Competitiveness

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Demographics						
Cosmetic Surgery	-0.96	-0.96	0.81	0.92	-0.06	-0.05
Gender	-0.33	-0.62	0.29	0.29	-0.06	-0.12*
Ethnicity	-0.57	-0.21	0.27	0.28	-0.11	-0.04
Romantic Relationship	-0.01	0.02	0.26	0.27	-0.01	0.02
Hometown	-0.07	-0.02	0.21	0.22	-0.02	0
Age	0.01	0.01	0.05	0.04	0.01	0.01
Body Anxiety	0.01	0.02	0.01	0.01	0.07	0.1
Step 2 TV						
Cosmetic Surgery	-1.03	-0.44	0.80	0.93	-0.06	-0.02
Gender	-0.55	-0.84	0.31	0.31	-0.1	-0.16**
Ethnicity	-0.54	-0.19	0.26	0.27	-0.1	-0.04
Romantic Relationship	-0.09	0.09	0.26	0.27	-0.02	0.02
Hometown	-0.09	-0.07	0.21	0.22	-0.02	-0.02
Age	0.02	0.02	0.05	0.04	0.02	0.02
Body Anxiety	0.02	0.02	0.01	0.01	0.07	0.09
TV	0.00	0.00	0.00	0.00	0.06	0.05
Makeover	0.00	0.01	0.00	0.00	0.14*	0.15**
Step 3 Priming						
Cosmetic Surgery	-1.08	-0.51	0.79	0.89	-0.06	-0.03
Gender	-0.49	-0.70	0.31	0.30	-0.09	-0.13
Ethnicity	-0.50	-0.10	0.26	0.26	-0.09	-0.02
Romantic Relationship	-0.12	0.09	0.25	0.26	-0.02	0.02
Hometown	-0.10	-0.03	0.21	0.21	-0.02	-0.01
Age	0.00	0.01	0.05	0.04	0	0.01
Body Anxiety	0.02	0.02	0.01	0.01	0.07	0.1
TV	0.00	0.00	0.00	0.00	0.06	0.05
Makeover	0.00	0.00	0.00	0.00	0.12*	0.13*
Priming/Neutral	1.15	1.56	0.25	0.26	0.22***	0.29***

Note: Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.02 for Step 1, Δ R^2 =.02 for Step 2, Δ R^2 = .05 for Step 3.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.02 for Step 1, Δ R^2 =.02 for Step 2, Δ R^2 = .08 for Step 3.
*p < .05, **p < .01, ***p < .001.

Table H4. Hierarchical Linear Regression on Perceived Benefit regarding Happiness

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Demographics						
Cosmetic Surgery	-1.01	-1.57	0.83	0.91	-0.06	-0.09
Gender	-0.73	-0.96	0.30	0.29	-0.13*	-0.18**
Ethnicity	-0.03	0.20	0.27	0.27	-0.01	0.04
Romantic Relationship	-0.02	0.00	0.26	0.27	-0.01	0
Hometown	0.00	0.01	0.22	0.21	0	0
Age	-0.05	-0.03	0.05	0.04	-0.05	-0.04
Body Anxiety	-0.01	-0.01	0.01	0.01	-0.04	-0.05
Step 2 TV						
Cosmetic Surgery	-0.99	-1.07	0.82	0.92	-0.06	-0.06
Gender	-1.12	-1.18	0.32	0.30	-0.21***	-0.22***
Ethnicity	0.05	0.22	0.27	0.27	0.01	0.04
Romantic Relationship	-0.13	-0.02	0.26	0.27	-0.02	0
Hometown	-0.01	-0.03	0.21	0.21	0	-0.01
Age	-0.04	-0.03	0.05	0.04	-0.04	-0.03
Body Anxiety	-0.01	-0.01	0.01	0.01	-0.05	-0.05
TV	0.00	0.00	0.00	0.00	-0.02	0.03
Makeover	0.01	0.00	0.00	0.00	0.19**	0.15**
Step 3 Priming						
Cosmetic Surgery	-1.05	-1.13	0.80	0.88	-0.06	-0.06
Gender	-1.07	-1.06	0.31	0.29	-0.2**	-0.2***
Ethnicity	0.10	0.30	0.26	0.26	0.02	0.06
Romantic Relationship	-0.17	-0.02	0.25	0.26	-0.03	0
Hometown	-0.03	0.01	0.21	0.21	-0.01	0
Age	-0.06	-0.03	0.05	0.04	-0.06	-0.04
Body Anxiety	-0.01	-0.01	0.01	0.01	-0.05	-0.05
TV	0.00	0.00	0.00	0.00	-0.02	0.03
Makeover	0.01	0.00	0.00	0.00	0.17**	0.13*
Priming/Neutral	1.25	1.42	0.25	0.26	0.23***	0.26***

Note. Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.02 for Step 1, Δ R^2 =.03 for Step 2, Δ R^2 = .05 for Step 3.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.04 for Step 1, Δ R^2 =.02 for Step 2, Δ R^2 = .07 for Step 3.
* $p < .05$, ** $p < .01$, *** $p < .001$.

Table H5. Hierarchical Linear Regression on Perceived Benefit regarding Attractiveness

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Demographics						
Cosmetic Surgery	-0.49	-0.69	0.44	0.49	-0.05	-0.07
Gender	-0.16	-0.45	0.16	0.16	-0.06	-0.16**
Ethnicity	-0.15	0.13	0.14	0.15	-0.05	0.04
Romantic Relationship	0.01	0.03	0.14	0.15	0.01	0.03
Hometown	0.02	-0.04	0.12	0.12	0.01	-0.02
Age	0.00	-0.01	0.03	0.02	0	-0.02
Body Anxiety	0.00	-0.01	0.01	0.01	0.04	0.08
Step 2 TV						
Cosmetic Surgery	-0.48	-0.53	0.44	0.50	-0.05	-0.05
Gender	-0.24	-0.51	0.17	0.17	-0.09	-0.18**
Ethnicity	-0.14	0.13	0.15	0.15	-0.05	0.05
Romantic Relationship	0.02	0.07	0.14	0.15	0.01	0.03
Hometown	0.02	-0.06	0.12	0.12	0.01	-0.03
Age	0.00	-0.01	0.03	0.02	0	-0.02
Body Anxiety	0.01	0.01	0.01	0.01	0.05	0.08
TV	0.00	0.00	0.00	0.00	-0.02	0.03
Makeover	0.00	0.00	0.00	0.00	0.07	0.08
Step 3 Priming						
Cosmetic Surgery	-0.53	-0.57	0.42	0.47	-0.06	-0.06
Gender	-0.20	-0.43	0.16	0.16	-0.07	-0.15**
Ethnicity	-0.10	0.19	0.14	0.14	-0.03	0.06
Romantic Relationship	-0.01	0.07	0.13	0.14	0	0.03
Hometown	0.01	-0.03	0.11	0.11	0	-0.01
Age	-0.02	-0.01	0.02	0.02	-0.03	-0.03
Body Anxiety	0.01	0.01	0.01	0.01	0.05	0.08
TV	0.00	0.00	0.00	0.00	-0.02	0.03
Makeover	0.00	0.00	0.00	0.00	0.06	0.06
Priming/Neutral	0.95	0.95	0.13	0.14	0.33***	0.33***

Note: Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.01 for Step 1, Δ R^2 =.004 for Step 2, Δ R^2 = .11 for Step 3.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.03 for Step 1, Δ R^2 =.01 for Step 2, Δ R^2 = .10 for Step 3.
*p < .05, **p < .01, ***p < .001.

Table H6. Hierarchical Linear Regression on the Perceived Risks of Cosmetic Surgery

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Demographics						
Cosmetic Surgery	-1.25	-1.34	0.69	0.78	-0.08	-0.08
Gender	-1.33	-1.76	0.25	0.25	-0.28***	-0.36***
Ethnicity	-0.05	-0.03	0.23	0.23	-0.01	-0.01
Romantic Relationship	-0.02	0.02	0.22	0.23	-0.02	0.02
Hometown	0.08	0.17	0.18	0.18	0.02	0.04
Age	-0.05	-0.05	0.04	0.03	-0.06	-0.07
Body Anxiety	0.00	0.00	0.01	0.01	0	0.01
Step 2 TV						
Cosmetic Surgery	-1.14	-1.13	0.69	0.79	-0.08	-0.07
Gender	-1.52	-1.98	0.27	0.26	-0.32***	-0.4***
Ethnicity	0.01	0.01	0.23	0.23	0	0
Romantic Relationship	-0.09	0.06	0.22	0.23	-0.02	0.01
Hometown	0.09	0.20	0.18	0.18	0.02	0.05
Age	-0.04	-0.04	0.04	0.03	-0.05	-0.06
Body Anxiety	0.00	0.00	0.01	0.01	0.01	0
TV	0.00	0.00	0.00	0.00	-0.11*	-0.12*
Makeover	0.00	0.00	0.00	0.00	0.06	0.1*
Step 3 Priming						
Cosmetic Surgery	-1.16	-1.16	0.69	0.78	-0.08	-0.07
Gender	-1.50	-1.92	0.27	0.26	-0.32***	-0.39***
Ethnicity	0.02	0.05	0.23	0.23	0	0.01
Romantic Relationship	-0.10	0.06	0.22	0.23	-0.02	0.01
Hometown	0.09	0.22	0.18	0.18	0.02	0.06
Age	-0.05	-0.04	0.04	0.03	-0.06	-0.06
Body Anxiety	0.00	0.00	0.01	0.01	0.01	0
TV	0.00	0.00	0.00	0.00	-0.11*	-0.12*
Makeover	0.00	0.00	0.00	0.00	0.06	0.09
Priming/Neutral	0.36	0.66	0.22	0.23	0.08^{+}	0.13**

Note. Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.09 for Step 1, Δ R^2 =.01 for Step 2, Δ R^2 = .01 for Step 3.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.14 for Step 1, Δ R^2 =.02 for Step 2, Δ R^2 = .02 for Step 3.
$^{+}p < .10$, $*p < .05$, $**p < .01$, $***p < .001$.

Table H7. Hierarchical Linear Regression on the Perceived Disadvantages of Physically Unattractive People in Social Relations

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Demographics						
Cosmetic Surgery	-0.09	-0.98	0.47	0.51	-0.01	-0.1
Gender	-0.56	-0.43	0.17	0.16	-0.18**	-0.14**
Ethnicity	0.02	-0.17	0.15	0.15	0.01	-0.06
Romantic Relationship	-0.03	0.00	0.15	0.15	-0.03	0
Hometown	-0.15	0.01	0.12	0.12	-0.06	0.01
Age	-0.03	-0.01	0.03	0.02	-0.05	-0.02
Body Anxiety	0.02	0.02	0.01	0.01	0.14**	0.15**
Step 2 TV						
Cosmetic Surgery	-0.14	-0.73	0.46	0.51	-0.01	-0.07
Gender	-0.66	-0.48	0.18	0.17	-0.22***	-0.16**
Ethnicity	0.03	-0.18	0.15	0.15	0.01	-0.06
Romantic Relationship	-0.13	0.00	0.15	0.15	-0.04	0
Hometown	-0.16	-0.03	0.12	0.12	-0.07	-0.01
Age	-0.03	-0.01	0.03	0.02	-0.05	-0.02
Body Anxiety	0.02	0.02	0.01	0.01	0.14*	0.15**
TV	0.00	0.00	0.00	0.00	0.08	0.13*
Makeover	0.00	0.00	0.00	0.00	0.12*	0.1^{+}
Step 3 Priming						
Cosmetic Surgery	-0.16	-0.75	0.46	0.50	-0.02	-0.07
Gender	-0.64	-0.43	0.18	0.17	-0.21***	-0.14**
Ethnicity	0.04	-0.15	0.15	0.15	0.01	-0.05
Romantic Relationship	-0.14	0.00	0.15	0.15	-0.05	0
Hometown	-0.17	-0.02	0.12	0.12	-0.07	-0.01
Age	-0.04	-0.01	0.03	0.02	-0.07	-0.02
Body Anxiety	0.02	0.02	0.01	0.01	0.14**	0.15**
TV	0.00	0.00	0.00	0.00	0.08	0.13*
Makeover	0.00	0.00	0.00	0.00	0.11*	0.09^{+}
Priming/Neutral	0.50	0.55	0.15	0.15	0.16**	0.18***

Note. Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.04 for Step 1, ΔR^2 =.02 for Step 2, ΔR^2 = .03 for Step 3.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.04 for Step 1, ΔR^2 =.03 for Step 2, ΔR^2 = .03 for Step 3.
$^{+}p < .10$, $*p < .05$, $**p < .01$, $***p < .001$.

Table H8. Hierarchical Linear Regression on the Perceived Beauty Power in Romance

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Demographics						
Cosmetic Surgery	-0.54	-2.46	0.82	0.89	-0.03	-0.14**
Gender	-0.88	-0.69	0.29	0.28	-0.16**	-0.13*
Ethnicity	0.64	-0.01	0.27	0.27	0.12*	0
Romantic Relationship			0.26	0.26	-0.06	-0.07
Hometown	-0.14	0.08	0.21	0.21	-0.03	0.02
Age	-0.05	-0.06	0.05	0.04	-0.05	-0.08
Body Anxiety	-0.03	-0.01	0.01	0.01	-0.13	-0.07
Step 2 TV						
Cosmetic Surgery	-0.60	-2.03	0.80	0.90	-0.04	-0.11*
Gender	-1.19	-0.83	0.31	0.30	-0.22***	-0.16**
Ethnicity	0.68	-0.01	0.26	0.26	0.12**	0
Romantic Relationship	-0.39	-0.41	0.26	0.26	-0.07	-0.08
Hometown	-0.17	0.02	0.21	0.21	-0.04	0.01
Age	-0.04	-0.05	0.05	0.04	-0.04	-0.07
Body Anxiety	0.03	0.01	0.01	0.01	0.14**	0.07
TV	0.00	0.00	0.00	0.00	0.07	0.07
Makeover	0.01	0.00	0.00	0.00	0.18**	0.11*
Step 3 Priming						
Cosmetic Surgery	-0.66	-2.07	0.79	0.88	-0.04	-0.12*
Gender	-1.14	-0.75	0.31	0.30	-0.21***	-0.14*
Ethnicity	0.72	0.04	0.26	0.26	0.13**	0.01
Romantic Relationship	-0.43	-0.41	0.25	0.26	-0.08	-0.08
Hometown	-0.18	0.05	0.21	0.21	-0.04	0.01
Age	-0.06	-0.06	0.05	0.04	-0.06	-0.08
Body Anxiety	0.03	0.02	0.01	0.01	0.13*	0.07
TV	0.00	0.00	0.00	0.00	0.07	0.07
Makeover	0.01	0.00	0.00	0.00	0.17**	0.1^{+}
Priming/Neutral	1.15	0.91	0.25	0.26	0.21***	0.17**

Note. Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.05 for Step 1, ΔR^2 =.04 for Step 2, ΔR^2 = .05 for Step 3.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.05 for Step 1, ΔR^2 =.02 for Step 2, ΔR^2 = .03 for Step 3.
$^{+}p < .10$, $*p < .05$, $**p < .01$, $***p < .001$.

Table H9. Hierarchical Linear Regression on the Perceived Beauty Power in Job Market

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Demographics						
Cosmetic Surgery	-0.30	-1.11	0.75	0.83	-0.02	-0.07
Gender	-0.40	-0.52	0.27	0.27	-0.08	-0.11^{+}
Ethnicity	-0.35	-0.36	0.25	0.25	-0.07	-0.07
Romantic Relationship	0.01	-0.02	0.24	0.25	0.01	-0.02
Hometown	-0.31	-0.30	0.20	0.19	-0.08	-0.08
Age	0.00	0.01	0.04	0.04	0	0.01
Body Anxiety	0.03	-0.03	0.01	0.01	0.18**	0.14*
Step 2 TV						
Cosmetic Surgery	-0.37	-0.82	0.75	0.84	-0.02	-0.05
Gender	-0.56	-0.64	0.29	0.28	-0.11	-0.13*
Ethnicity	-0.33	-0.35	0.25	0.25	-0.07	-0.07
Romantic Relationship	0.03	-0.11	0.24	0.25	0.01	-0.02
Hometown	-0.33	-0.33	0.20	0.20	-0.08	-0.09
Age	0.00	0.01	0.04	0.04	0	0.01
Body Anxiety	0.04	0.03	0.01	0.01	0.18**	0.14*
TV	0.00	0.00	0.00	0.00	0.07	0.02
Makeover	0.00	0.00	0.00	0.00	0.11*	0.09
Step 3 Priming						
Cosmetic Surgery	-0.37	-0.85	0.75	0.83	-0.02	-0.05
Gender	-0.56	-0.58	0.29	0.28	-0.11^{+}	-0.12*
Ethnicity	-0.33	-0.31	0.25	0.25	-0.07	-0.06
Romantic Relationship	0.03	-0.11	0.24	0.24	0.01	-0.02
Hometown	-0.33	-0.31	0.20	0.19	-0.08	-0.08
Age	0.00	0.01	0.04	0.04	0	0.01
Body Anxiety	0.04	0.03	0.01	0.01	0.18**	0.14**
TV	0.00	0.00	0.00	0.00	0.07	0.02
Makeover Show	0.00	0.00	0.00	0.00	0.11*	0.08
Priming/Neutral	0.14	0.72	0.24	0.24	0.03	0.15**

Note. Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.03 for Step 1, ΔR^2 =.02 for Step 2, ΔR^2 = .001 for Step 3.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.04 for Step 1, ΔR^2 =.01 for Step 2, ΔR^2 = .02 for Step 3.
$^{+}p < .10$, $*p < .05$, $**p < .01$, $***p < .001$.

Table H10. Hierarchical Linear Regression on the Perceived Beauty Power in Social Relations

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Demographics						
Cosmetic Surgery	-0.71	-1.03	0.44	0.50	-0.08	-0.1*
Gender	-0.23	-0.50	0.16	0.16	-0.08	-0.17**
Ethnicity	0.17	-0.14	0.14	0.15	0.06	-0.05
Romantic Relationship	-0.09	-0.05	0.14	0.15	-0.09	-0.05
Hometown	-0.08	-0.11	0.11	0.12	-0.03	-0.05
Age	-0.02	-0.01	0.03	0.02	-0.03	-0.02
Body Anxiety	-0.01	-0.02	0.01	0.01	-0.11^{+}	-0.16**
Step 2 TV						
Cosmetic Surgery	-0.74	-0.87	0.44	0.51	-0.08	-0.09
Gender	-0.31	-0.53	0.17	0.17	-0.11	-0.18**
Ethnicity	0.18	-0.15	0.14	0.15	0.06	-0.05
Romantic Relationship	-0.27	-0.15	0.14	0.15	-0.1*	-0.05
Hometown	-0.08	-0.14	0.11	0.12	-0.04	-0.06
Age	-0.01	-0.01	0.03	0.02	-0.03	-0.02
Body Anxiety	0.01	0.02	0.01	0.01	0.11*	0.16**
TV	0.00	0.00	0.00	0.00	0.05	0.08
Makeover	0.00	0.00	0.00	0.00	0.09	0.07
Step 3 Priming						
Cosmetic Surgery	-0.74	-0.89	0.44	0.50	-0.08	-0.09
Gender	-0.30	-0.51	0.17	0.17	-0.11	-0.17**
Ethnicity	0.19	-0.13	0.14	0.15	0.06	-0.05
Romantic Relationship	-0.28	-0.15	0.14	0.15	-0.1*	-0.05
Hometown	-0.09	-0.13	0.11	0.12	-0.04	-0.06
Age	-0.02	-0.01	0.03	0.02	-0.03	-0.02
Body Anxiety	0.01	0.02	0.01	0.01	0.11*	0.17**
TV	0.00	0.00	0.00	0.00	0.05	0.08
Makeover Show	0.00	0.00	0.00	0.00	0.09^{+}	0.06
Priming/Neutral	0.16	0.27	0.14	0.15	0.06	0.09^{+}

Note. Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.03 for Step 1, Δ R^2 =.01 for Step 2, Δ R^2 = .003 for Step 3.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.05 for Step 1, Δ R^2 =.01 for Step 2, Δ R^2 = .01 for Step 3.
$^{+}p < .10$, $*p < .05$, $**p < .01$, $***p < .001$.

Table H11. Interaction Effect of Priming and Makeover Show Viewing on the Perceived Disadvantages of Physically Unattractive in Social Relations

	b		SE b		β	
	pair 1	pair 2	pair 1	pair 2	pair 1	pair 2
Step 1 Main effect						
Cosmetic Surgery	-0.16	-0.75	1.21	0.50	-0.02	-0.07
Gender	-0.64	-0.43	0.46	0.17	-0.21***	-0.14*
Ethnicity	0.04	-0.15	0.18	0.15	0.01	-0.05
Romantic Relationship	-0.14	0.00	0.15	0.15	-0.05	0.00
Hometown	-0.17	-0.02	0.15	0.12	-0.07	-0.01
Age	-0.04	-0.01	0.12	0.02	-0.07	-0.02
Body Anxiety	0.02	0.02	0.03	0.01	0.14*	0.15**
TV	0.00	0.00	0.01	0.00	0.08	0.13**
Makeover Show (MS)	0.00	0.00	0.00	0.00	0.11*	0.09**
Priming	0.50	0.55	0.00	0.50	0.16***	0.18***
Step 2 Interaction						
Cosmetic Surgery	-0.08	-0.87	0.45	0.50	-0.01	-0.09
Gender	-0.64	-0.46	0.18	0.17	-0.21***	-0.15**
Ethnicity	0.03	-0.15	0.15	0.15	0.01	-0.05
Romantic Relationship	-0.12	0.00	0.15	0.15	-0.04	0.00
Hometown	-0.21	-0.03	0.12	0.12	-0.08	-0.01
Age	-0.03	-0.01	0.03	0.02	-0.06	-0.02
Body Anxiety	0.02	0.02	0.01	0.01	0.14*	0.16**
TV	0.00	0.00	0.00	0.00	0.08	0.12*
Makeover Show (MS)	0.00	0.00	0.00	0.00	-0.02	-0.02
Priming	0.50	0.54	0.14	0.15	0.16***	0.18***
Priming*MS	0.00	0.00	0.00	0.00	0.18**	0.15*

Note. Pair 1 = Experimental Group vs. Control 1, N= 427, R^2 =.08 for Step 1, ΔR^2 =.01 for Step 2.
Pair 2 = Experimental Group vs. Control 2, N= 398, R^2 =.10 for Step 1, ΔR^2 =.01 for Step 2
$^{+}p < .10$, $*p < .05$, $**p < .01$, $***p < .001$.

Table H12. Hierarchical Multiple Regression on Perceived Benefit in Appearance (Control Groups)

	b	SE b	β
Step 1 Demographics	6.05	1.46	
Cosmetic Surgery	-0.37	0.55	-0.03
Gender	-0.03	0.19	-0.01
Ethnicity	0.01	0.17	0
Romantic Relationship		0.18	0
Hometown	-0.14	0.14	-0.05
Age	-0.03	0.03	-0.05
Body Anxiety	0.01	0.01	0.05
Step 2 TV	5.96	1.48	
Cosmetic Surgery	-0.36	0.56	-0.03
Gender	-0.03	0.20	-0.01
Ethnicity	0.02	0.17	0.01
Romantic Relationship	0.01	0.18	0
Hometown	-0.14	0.14	-0.05
Age	-0.03	0.03	-0.05
Body Anxiety	0.01	0.01	0.05
TV	0.00	0.00	0.02
Makeover Show	0.00	0.00	0.01
Step 3 Neutral Priming	5.92	1.43	
Cosmetic Surgery	-0.30	0.54	-0.03
Gender	0.01	0.20	0
Ethnicity	0.03	0.16	0.01
Romantic Relationship	0.05	0.17	0.02
Hometown	-0.10	0.14	-0.04
Age	-0.02	0.03	-0.04
Body Anxiety	0.01	0.01	0.05
TV	0.00	0.00	0.02
Makeover	0.00	0.00	0.01
Neutral Priming (Control Groups)	-0.85	0.17	-0.25***

Note. N= 381, R^2 =.009 for Step 1, Δ R^2 =.001 for Step 2, Δ R^2 = .06 for Step 3.
*p < .05, **p < .01, ***p < .001.

Table H13. Hierarchical Multiple Regression on Beauty Power in Social Relations (Control Groups)

	b	SE b	β
Step 1 Demographics			
Cosmetic Surgery	-1.30	0.81	-0.08
Gender	-0.52	0.28	-0.1
Ethnicity	-0.35	0.25	-0.07
Romantic Relationship	-0.30	0.26	-0.06
Hometown	-0.33	0.20	-0.08
Age	0.03	0.05	0.03
Body Anxiety	0.02	0.01	0.11
Step 2 TV			
Cosmetic Surgery	-1.09	0.81	-0.07
Gender	-0.76	0.30	-0.15*
Ethnicity	-0.29	0.25	-0.06
Romantic Relationship	-0.33	0.26	-0.07
Hometown	-0.29	0.20	-0.07
Age	0.04	0.05	0.04
Body Anxiety	0.02	0.01	0.11
TV	0.00	0.00	-0.05
Makeover	0.00	0.00	0.13*
Step 3 Neutral Priming			
Cosmetic Surgery	-1.06	0.81	-0.07
Gender	-0.74	0.30	-0.15*
Ethnicity	-0.29	0.24	-0.06
Romantic Relationship	-0.31	0.26	-0.06
Hometown	-0.26	0.20	-0.07
Age	0.05	0.05	0.05
Body Anxiety	0.02	0.01	0.11*
TV	0.00	0.00	-0.05
Makeover	0.00	0.00	0.13*
Neutral Priming (Control Groups)	-0.56	0.26	-0.11*

Note. N= 381, R2 =.03 for Step 1, Δ R2 =.02 for Step 2, Δ R2 = .01 for Step 3.
*p < .05, **p < .01, ***p < .001.

VITA

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Lee worked in the field of media since 1999. Prior to entering her doctoral program, Lee worked for a media research firm in Taiwan as an account manager who initiated, conducted, and sold media research projects for radio stations, TV stations, newspapers, and advertising agents.