## PREDICTING INTEREST IN AND ATTITTUDES ABOUT COSMETIC SURGERY AMONG EMERGING ADULTS

by

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# THESIS ABSTRACT PREDICTING INTEREST IN AND ATTITTUDES ABOUT COSMETIC SURGERY AMONG EMERGING ADULTS

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Cosmetic surgery has become increasingly popular in the last decade due in part to the affordability and convenience of these procedures. However, an understanding of the personal qualities that may lead some individuals to be more likely to pursue surgery than others has yet to be achieved. This research aims to examine predictors of emerging adults' attitudes about and interest in obtaining these procedures. One hundred and seventy participants (59.4% female, M age= 19.77) completed surveys assessing demographic (e.g., age) and psychological (e.g., self-esteem) constructs. Analyses revealed that for the entire sample, gender, age and relationship status were predictors of interest in cosmetic surgery. Age and television consumption were significant predictors in the entire samples' attitudes towards cosmetic surgery. Among the emerging adult subsample, gender and television consumption predicted interest in cosmetic surgery while television consumption significantly predicted attitudes about cosmetic surgery. For the entire sample, body image, life satisfaction, and self-esteem were significantly correlated to interest in and attitudes about cosmetic surgery, while body image, self-

esteem, and happiness were found to be significant correlates among the emerging adult subsample. Overall, several important potential predictors of attitudes about and interest in cosmetic surgery were found. Implications of these findings are discussed in the context of development during emerging adulthood.

*Keywords:* cosmetic surgery, attitudes, body image, self-esteem

## Predicting Interest in and Attitudes about Cosmetic Surgery among Emerging Adults

In 2012, \$10.4 billion dollars were spent on cosmetic surgery procedures with a total of 14,629,276 cosmetic procedures being performed (American Society of Plastic Surgery [ASPS], 2013). From 2011 to 2012 alone, there was a 5% increase in cosmetic procedures obtained by a more diverse clientele of age, gender, and ethnicity than years prior (American Society of Plastic Surgeons, 2013). Further, from 2000 to 2012, there was a documented 98% increase in the number of procedures being performed with over thirty different procedures being offered and available to patients (American Society of Plastic Surgeons, 2011). With the growing numbers of patients pursuing cosmetic surgery, as well as the diversity of patients obtaining procedures, a more thorough understanding of the attitudes towards cosmetic surgery and interest in obtaining cosmetic surgery warrant consideration. In any surgery, there are both costs and benefits to a patient. However, when it comes to elective cosmetic surgery, often the reasoning behind electing the surgery as well as the side effects from surgery may be more deleterious than beneficial. This study will build on past research in an attempt to understand factors that may be contributing to the significant increase in cosmetic surgery procedures in recent years. In particular, this research will address demographic and psychological factors that may contribute to positive versus negative attitudes about cosmetic surgery and interest in pursuing surgery among emerging adults- an age group increasingly likely to pursue surgery (Atwell, 2006).

Emerging adulthood, a developmental period first described by Jeffrey Arnett, is typically used to refer to young people aged 18 to 25 (Arnett, 2000; Arnett, 2007),

although in more recent years, this age group has expanded to include individuals up to the age of 29 (Arnett, 2011). This developmental period is described as an unstructured time (e.g., not structured by family and the typical daily activities that would occur with one's family of origin) in which freedom allows individuals to "find themselves" (Arnett, 2007). This is a period of life in which young people explore in three facets of their lives: love (e.g., attracting a romantic partner), work (e.g., many are just graduating from college and searching for jobs), and their worldviews (e.g., how they view and feel about social issues; Arnett, 2000). Due to the developmental transitions taking place during this period of life, young people may be vulnerable to developing interest in cosmetic surgery. The ASPS reports from 2012 (ASPS, 2013) indicate that the number of procedures for ages 13-19 increased 2% to total 236,000 procedures; in 2011, a number wasn't even reported for this age group. For ages 20-29, procedures increased from 794,000 to 804,000 (1%) with numbers continuing to rise each year for these two age groups (ASPS, 2013). Therefore, the focus of this research is attitudes about and interest in cosmetic surgery among a relatively young and healthy sample of emerging adults. This study will also extend past work that has focused almost exclusively on older samples comprised of clinical or patient populations (Kinnunen, 2010; Sarwer, Brown, & Evans, 2007). Past research may have focused on an older population because their numbers presented by the ASPS (2013) appear to be larger (e.x., ages 40-55 had obtained cosmetic surgery; a 6% increase from 2011-2012 (ASPS, 2013)). However, younger groups are among the fastest growing group pursuing surgery and have fewer reasons to seek reconstructive surgery than older adults (Arnett, 2006; Frederickson & Roberts, 1997).

#### **Positive Consequences of Cosmetic Surgery**

Some research suggests that cosmetic surgery provides benefits to patients (Castle, Honigman, Phillips, 2002). In Castle, Honigman, and Phillips' (2002) metaanalysis, thirty-six studies were examined and findings indicated that social, psychological, and physical aspects of life were improved by cosmetic surgery. Some of the psychosocial variables included self-esteem, quality of life, shyness, self-worth, and social confidence. Researchers (Castle et al., 2002) also point out that although the majority of those involved in their study had experienced positive outcomes, there are people who experience a decline in self-esteem and other psychosocial variables following surgery. The authors warned that there are factors, such as age, traits such as narcissism, and disordered thinking, linked with these poor outcomes that should be considered during cosmetic surgery consultations (Castle, Honigman, Phillips, 2002). Sarwer, Wadden, and Whitaker (2002), found that 62% of participants who had undergone cosmetic surgery indicated that they were extremely satisfied with the outcomes. Reports of higher self-ratings of attractiveness, lower reports of body dysmorphic disorder, and better overall mood ratings were seen in post-operative patients. The NIH (National Institute of Health, 2004) has supported research that highlights some positive outcomes of cosmetic surgery. In one study, surgeries are ranked in terms of outcomes, with mammoplasties (i.e. reduction or enlargement of the breasts) producing the most rewarding psychological and psychosocial outcomes of any procedure. Rhinoplasty ranked second, and was described as eliciting social confidence and high satisfaction with surgery; face lifts have been associated with better well-being and increased life satisfaction. In sum, Honigman and colleagues (2004) suggest that

quality of life, social functioning, and relationship quality are most frequently reported as improved after surgery along with a reduction in anxiety and better treatment by unacquainted persons.

## **Negative Consequences of Cosmetic Surgery**

Death and suicide are two serious outcomes associated with the pursuit of cosmetic surgery; some patients die from the actual surgery and some patients commit suicide after having a cosmetic procedure (McLaughlin, Wise, & Lipworth, 2004; Sarwer, Brown, & Evans, 2007). However, although scholarly articles, organizational websites, and government websites emphasize the risk of death and suicide, no specific statistics are offered to indicate the actual prevalence rates. In scholarly articles, the risk of suicide is highlighted, but mainly in regards to breast surgery patients (McLaughlin, Wise, Lipworth, 2004; Sarwer, Brown, Evans, 2007). McLaughlin and colleagues (2004) found that the risk of suicide in women who had had breast surgery (i.e. reduction, lift, augmentation, etc.) compared to women of the same ages who had not undergone surgery was two to three times higher for the women in the surgery group. Sarwer, Brown, and Evans (2007) found similar results in their research; there were 126 suicides across six different studies analyzed, which came out to be two times higher than the general population. Although research does not suggest a direct, causal relationship between surgery and suicide (i.e. with cosmetic surgery being a direct cause of suicide), the association is concerning and not clearly understood.

Although some patients experience positive outcomes of surgery, there are also a large number of patients who experience negative outcomes besides suicide and death. Some patients have reported that they experience a loss of identity after surgery (Honigman et. al, 2004). Other studies show that there are some negative outcomes such as poorer self-esteem, a desire to obtain even more surgery, and high rates of body dysmorphic disorder (Castle, Honigman, & Phillips, 2002). Currently, research presents some contradictory results, as some studies find evidence that cosmetic surgery enhances benefits while other studies report the opposite effect (Honigman et al., 2004; Suissa, 2008). The current study will help to highlight why some individuals may benefit from surgery when others do not.

Suissa (2008) reported that, for some individuals, there is an overwhelming addiction to plastic surgery for several reasons. One reason is that people who undergo plastic surgery are increasingly unsatisfied with their body overall. As they begin to "fix" one part, they realize the imperfections of other parts and aim to "fix" those other parts. A second reason is that societal definitions of beauty change across time. With this change and with plastic surgery being a readily available tool, plastic surgery becomes addictive to keep individuals abreast of the "trends" (Suissa, 2008). Physical side effects that result from cosmetic surgery include infection, scarring, pain, bruising, and loss of sensation to the body part operated on (Nabi, 2009). Regardless of the risks associated with cosmetic surgery, a large number of individuals continue to pursue surgery. In 2012, 51% of patients were repeat customers (ASPS, 2013). The fact that large numbers of patients are repeat customers seems to indicate that they are not satisfied with their bodies and/or appearance even after initial cosmetic surgery procedures.

Cosmetic surgery, which can be an addictive and chronic pursuit, may be explained in part by other psychopathological problems that individuals experience, such as body dysmorphic disorder (BDD). Body Dysmorphic Disorder is severe dissatisfaction with one's body that is recognized in the APA's DSM-IV as a clinical disorder (Suissa, 2008). The desire to perfect the body can be overwhelming. Psychological (i.e., having a cognitive, behavioral, and emotional), sociocultural (i.e., related to family upbringing, childhood teasing, etc.), and neurobiological (i.e., related to serotonin and dopamine functioning) factors are all believed to contribute to this disorder (Crerand, Franklin, & Sarwer, 2006). Sarwer and his colleagues (2007) found that 3-15% of cosmetic surgery patients have a form of BDD and that 90% of these patients experience worse symptoms of BDD after surgery than the symptoms that existed before the surgery. Perhaps, the most shocking finding from this study was that of cosmetic surgery patients with BDD, 57.8% dealt with impaired psychological functioning after surgery by committing suicide (Sarwer, Brown, & Evans, 2007). Therefore, although cosmetic surgery may offer benefits to some, it is clearly not a "simple fix" for body and/or face concerns for all patients. Regardless of these risks, individuals still pursue surgery and a number of psychological theories have been put forth that offer explanations as to why this persistence occurs.

#### **Theoretical Background**

A prominent theory contributing to our understanding of interest in elective cosmetic surgery is Objectification Theory. Objectification Theory, proposed by Fredrickson and Roberts (1997), suggests that our bodies are often looked at as simply just a physical body or a collection of body parts with the potential for use by another human being. Fredrickson and Roberts (1997) also point out that the experience of objectification (by women in particular) leads individuals to value themselves as objects. This theory implicates the media in shaping the view of one's own perception of their physical self (Calogero, Park, & Rahemtulla, 2010; Markey & Markey, 2011). Researchers have pointed out that the media can deleteriously affect an individuals' behaviors regarding health (Markey & Markey, 2010), and that there are both interpersonal and intrapersonal factors that contribute to the objectification of individuals by others and an individual's objectification of themselves (Calgero, Pina, Park, & Rahemtulla, 2010; Park, Calgero, Harwin, & DiRaddo, 2009). Objectification theory places women and some men (Ricciardelli & Clow, 2009) in a position where they are judged as objects expected to maintain a certain standard of appearance, which in turn promotes sexual objectification, self-surveillance, and body shame (Calgero, Pina, Park, & Rahemtulla, 2010). Gender, age, and race effect who experiences objectification and to what extent shame, anxiety, disordered eating, depression, sexual dysfunction, sexual victimization, and other mental health risks are associated with objectification (Fredrickson & Roberts, 1997).

Cultivation Theory complements Objectification Theory in its focus on sociocultural influences on self-perceptions (Frederickson & Roberts, 1997; Markey & Markey, 2011; Nabi, 2009; Schooler et. al, 2004). Cultivation theory suggests that when there is frequent exposure to the media and its' influences, one begins to accept them as reality; the media plays a prominent role in producing idealistic appearance values (Markey & Markey, 2011; Schooler, Ward, Merriwether, Caruthers, 2004). In other words, individuals' exposure to the media cultivates their ideals. These ideals then become standards that promote objectification of both the individual and others (Nabi, 2009; Schooler et. al, 2004). When this ideal is unattainable, which it most often is, depression, low self-esteem, and disordered eating arises (Schooler et. al, 2004). Cultivation theory is supported by research indicating that the amount of television watched is associated with individuals' body and appearance ideals (Nabi, 2009). There is also evidence supporting the idea that the more a person is exposed to media in general (i.e. television, magazines, movies, etc.), the more likely a person is to internalize the images they see, which produces a desire to become as close to that image a possible (Nabi, 2009).

There are several ties between Cultivation theory and Objectification theory. Cultivation theory provides the general context in which an individual learns and acquires rigorous, often unobtainable body ideals (Markey & Markey, 2011; Nabi, 2009; Schooler et. al, 2004), and objectification theory helps to explain how these strict ideals impact an individual and their sense of self (Calgero, Pina, Park, & Rahemtulla, 2010; Markey & Markey, 2010; Park, Calgero, Harwin, & DiRaddo, 2009). These theories suggest negative consequences of trying to achieve beauty ideals, which makes the study of cosmetic surgery and an individual's interest in and attitudes about cosmetic surgery important. Young adults may be particularly vulnerable to internalizing cultural beauty norms, wanting to achieve beauty ideals, and not realizing the potential risks associated with cosmetic surgery. Thus, they may be more likely to go out of their way to obtain surgery and may avoid acknowledging the risks that are associated with obtaining surgery; a "quick fix" solution may be particularly appealing to this age group.

#### Influences on Attitudes about and Interest in Cosmetic Surgery

In this study, a variety of demographic and psychological factors will be examined as predictors of attitudes about and interest in cosmetic surgery. These factors will be examined given previous research suggesting their potential to explicate the growing demand for cosmetic surgery (Calogero, Pina, Park, & Rahemtulla, 2010; Castle, Honigman, & Phillips, 2002; Markey & Markey, 2010; & Mazzeo, Trace, Mitchell, & Gow, 2007). Research has shown the effects that attitudes have on interest in surgery, in that those who express more positive attitudes are more likely to display vested interested in pursuing surgery as well (Johnson, Siegel, & Crano, 2012).

It has been noted that women are more likely than men to undergo cosmetic surgery (Davis, 2002; Kinnunen, 2010; Thorpe, Ahmed, Steer, 2004; Swami, Campana, & Coles, 2012). However, men are becoming more frequent cosmetic surgery patients (Thorpe, Ahmed, & Steer, 2004). Men and women are said to undergo surgery for different reasons; women pursue interest in cosmetic surgery because they struggle with poor body image while men use cosmetic surgery for personal gain and functioning (Davis, 2002). Davis (2002), also points out the men are becoming more likely to be objectified, which is bringing the gap between gender inequality and objectification closer. In this study, gender will be considered in combination with the other variables investigated as predictors of attitudes about and interest in cosmetic surgery.

In prior decades, cosmetic surgery was something that only the wealthy could afford (Prendergast, Ong'uti, Ortega, Khoury, Onwuka, Bolorunduro, Cornwell, & Paul, 2011). However, cosmetic surgery is now being obtained by people of varying socioeconomic groups (Didie & Sarwer, 2003; Slevec & Tiggemann, 2010). Economic factors are shown to influence a patient's decision to pursue cosmetic surgery; however the increasing affordability along with financing options have provided a means for a larger number of patients to obtain cosmetic surgery (Prendergast et al., 2011; Didie & Sarwer, 2003). Typically, patients use money from savings (61%), they refinance, they borrow money, or they use money that they would otherwise use to pay bills to finance cosmetic surgery (9.5%) (Didie & Sarwer, 2003).

Given the associations between socioeconomic status (SES) and surgery as well as SES and education, education level of participants will also be examined in this research. Although limited research is available on this topic, there is data to suggest that more educated individuals pursue cosmetic surgery more than their less educated counterparts, therefore, education level is positively correlated with pursuit of cosmetic surgery due to higher SES status (Schlessinger, Schlessinger, & Schlessinger, 2010). Unfortunately, research in this area has only focused on women. In this study, although there is not a tremendous amount of variability in the educational attainment of our participants due to their relatively homogenous age (i.e., they are all college students), education of participants will be considered and investigated as a predictor of attitudes about and interest in cosmetic surgery.

Another demographic feature that has been understudied, but will be examined in this research, is the romantic relationship status of an individual as a predictor of attitudes about and interest in cosmetic surgery. Studies suggest that individuals who are not married may be more interested in cosmetic surgery in order to provide elite competition against other potential mates (Frederick, Lever, & Peplau, 2007). However, some conflicting research suggests that the majority of cosmetic surgery patients are in fact married (Schlessinger, et. al, 2010). Again, this research focuses mainly on women and is not conclusive. In this study, relationship status of participants will be considered and investigated as a predictor of attitudes about and interest in cosmetic surgery. Prevalence of cosmetic surgery among diverse ethnic groups has increased, but Euro-Americans are still primarily interested in cosmetic surgery when compared to other ethnic groups. One study suggests that Euro-Americans have lower self-esteem and acceptance of their body (Swami, Campana, & Coles, 2012). Reports from the ASPS have also shown that the diversity in ethnicity of cosmetic surgery patients is becoming more widespread; ethnic minorities experience a 215% increase in cosmetic surgery from 2000 to 2009 (Prendergast et al., 2011). In this study, ethnicity will be considered in combination with the other variables investigated as predictors of attitudes about and interest in cosmetic surgery. While most studies compare only Euro-Americans and African-Americans, our study is unique in that it will be look at Euro-Americans, African-Americans, Hispanic-Americans, and Asian-Americans.

Older women are becoming more interested in cosmetic surgery in attempts to regain their youth; something now being coined a "second youth" in the literature (Kinnunen, 2010). It has also been seen that in the past decade, a larger number of youths have become interested in cosmetic surgery (Markey & Markey, 2009). It now appears that men and women, both young and old, are increasingly opting for cosmetic surgery (Slevec & Tiggeman, 2010). This research will focus on emerging adults (M age = 19.77), in an attempt to understand their attitudes about and interest in cosmetic surgery at a vulnerable developmental period. Although there is not a large age range examined in this study, age will be considered in combination with the other variables investigated as predictors of attitudes about and interest in cosmetic surgery.

Although some research has suggested that weight status may not be a significant predictor of attitudes about and interests in cosmetic surgery (Markey & Markey, 2009),

it will still be considered as an assessment of physical appearance in this research. This study will be looking at both men and women (past studies have focused almost exclusively on women), thus consideration of an "objective" assessment of physical appearance may prove valuable.

The media has also been shown to increase interest in cosmetic surgery. Reality television shows have been investigated by researchers as potential influences on interest in cosmetic surgery procedures (Jonzon, 2009). The media seems to be powerful in influencing its' viewers as well as producing negative effects in the context of behaviors regarding health (i.e. disordered eating, self-esteem, and self-evaluation; Markey & Markey, 2009; Markey & Markey, 2010; Markey & Markey, 2011; Mazzeo, Trace, Mitchell, & Gow, 2007). The amount of television exposure to shows featuring cosmetic surgery will be examined in this study as a predictor of attitudes about and interest in cosmetic surgery.

There are also many psychological factors that predict interest in cosmetic surgery. Mainly, depression, self-esteem, and body image seem to be the most prevalent psychological risk factors among cosmetic surgery patients that have been examined in past studies (Ambro & Wright, 2010; Thorpe, Ahmed, Steer, 2004). In this study, we consider some of these psychological factors in combination with other factors that may predict interest in and attitudes about cosmetic surgery.

The present literature that examines cosmetic surgery often measures quality of life after cosmetic surgery, but rarely before going under the knife (Honigman et al., 2004; Jabir, 2013; Kamburoglu & Ozgur, 2007; Ozgur, Tunca, & Gulter Gursu, 1998; Saunders & Roy, 1999). There is also controversy in the literature in that some researchers have found an improvement in life satisfaction after surgery (Kamburoglu & Ozgur, 2007), while others have found the opposite (Ozgur Tunca, & Gulter Gursu, 1998). There is very little literature present that examines life satisfaction in association with the pursuit of cosmetic surgery, and even medical officials suggest measuring life satisfaction in examining potential patients (Jabir, 2013). However, research suggests a relationship between life satisfaction and depression (Saunders & Roy, 1999). Further, research suggests that about 20%-70% of patients seeking cosmetic surgery are clinically depressed; this rate is considered to be significantly higher than the general public (Ambro & Wright, 2010). In one longitudinal study, it was shown that symptoms of depression produced an odds ratio of 1.66 in predicting prospective cosmetic surgery (Soest, Kvalem, & Wichstrom, 2012). This means that depressed participants were 1.66 times more likely to consider cosmetic surgery when compared to their non-depressed peers. The study of life satisfaction is important for several reasons. Life satisfaction (or lack there of, somewhat similar to depression) is indicative of both negative affect and consequences (Larsen, 1978; Larsen, 2009) as well as extreme dysfunctioning such as BDD, which in cosmetic patients, may lead to suicide (Sarwer, 2001; Sarwer et al., 2002; Sarwer et al., 2007). By overlooking life satisfaction and focusing on depression only, research may be potentially missing one indicator of psychological functioning of potential cosmetic surgery patients. This study will examine whether or not life satisfaction among men and women may predict interest in and attitudes about cosmetic surgery.

Poor body image can lead to an increased interest in cosmetic surgery and can also lead to depression. Often, patients are unhappy, have low self-esteem, and lack confidence before surgery (Sarwer et al., 2002; Thorpe, Ahmed, & Steer, 2004). In one study, researchers found that there was a correlation between societal pressure (i.e. to obtain appearance and attractiveness standards set by the culture they live in) and body image. These societal pressures decreased body image, which were also shown to increase favorable attitudes towards cosmetic surgery. In sum, higher dissatisfaction with the body and higher disturbances in negative body images seems to lead to an increase in cosmetic surgery interest (Menzel, Sperry, Small, Thompson, Sarwer, & Cash, 2011). Studies have shown that patients often have an unrealistic perception of their bodies. This may result in a discord between what the patients see themselves as and what the patient wants to look like, contributing to low self-esteem and confidence (Thorpe, Ahmed, & Steer, 2004). Currently, there is a lack of conclusive evidence to determine whether or not surgery can improve the psychological functioning of these patients, but research has been able to show that the stress of surgery itself can worsen some of the present psychological problems (Ambro & Wright, 2010). Therefore, in this study, happiness and body dissatisfaction will be examined separately and in combination as predictors of attitudes about and interest in cosmetic surgery.

Many patients seek cosmetic surgery in the hopes that they will increase their self-esteem. Eriksen and Goering (2011) found that patients who underwent cosmetic surgery had lower self-esteem than those who did not; this remained significant when controlling for other demographic indicators. Self-esteem has been show to play a large role in the perception of one's own body and low self-esteem increases an individual's consideration of cosmetic surgery, perhaps because patients hope to increase their sense of self (Ricciardelli & Clow, 2009). In the present study, self-esteem will be examined

separately and in combination with other variables as a predictor of attitudes about and interest in cosmetic surgery.

Another predictor that will be examined is happiness. Past research has not considered happiness as a predictor of cosmetic surgery, but presumably individuals are pursuing surgery in greater numbers because they believe the result of surgery will increase their level of happiness. Clearly, media information made available to the U.S. public on a daily basis stresses a link between physical attractiveness and happiness (Slevec & Tiggemann, 2010). Further, a growing number of products (and, indeed surgical procedures) are advertised and marketed to the public as a means of increasing happiness (Slevec & Tiggemann, 2010). Although similar constructs, researchers have established that happiness and self-esteem are not the same. Happiness is fueled by mood, relationships (e.g., social), life purpose, and life satisfaction and self-esteem is predicted by motivation and agency. Researchers have suggested that it is important to consider happiness and self-esteem in combination (Lyubomirsky, Tkach, & Dimatteo, 2006).

#### **The Present Study**

This study aims to examine predictors of attitudes about and interest in cosmetic surgery. The proposed study intends to extend the literature by looking at both emerging adult men and women as well as looking at predictors that have not been examined in past research, or that have been understudied, such as gender differences within variables, such as education and relationship status. Variables to be included in the analyses included demographic variables: age, gender, ethnicity, socioeconomic status, relationship status, body mass index, education, and television consumption. In addition, psychological variables including self-esteem, life satisfaction, happiness, and body image will be examined as predictors of attitudes towards and interest in cosmetic surgery. The specific, directional hypotheses are listed below.

It is hypothesized that being older, male, non-Euro-American, married, and educated will predict more negative attitudes about cosmetic surgery and less interest in pursuing surgery. I hypothesize that a higher BMI and lower body image will predict a more positive attitude towards cosmetic surgery. I hypothesized that participants with low self-esteem, low life satisfaction, and low reports of happiness will report more positive attitudes towards cosmetic surgery. More specifically, my predictions are:

Demographic Predictors:

- Women will have more favorable attitudes about and will be more interested in cosmetic surgery than men.
- 2) The older a person is, the more favorable attitudes about cosmetic surgery and the more interested he or she will be in cosmetic surgery.
- Euro-Americans will have more favorable attitudes about and will be more interested in cosmetic surgery than other ethnic groups.
- 4) Participants who are not in relationship (single, divorced, or widowed), will have more favorable attitudes about and will have higher interest in cosmetic surgery than their peers who are partnered.
- 5) Participants with a higher BMI will have more favorable attitudes about and a greater interest in cosmetic surgery than those with a lower BMI.

- 6) Participants who view television more frequently will have more favorable attitudes about and will be more interested in cosmetic surgery than participants who view less television.
- 7) Participants who have a higher educational obtainment will have more favorable attitudes about and will be more interested in cosmetic surgery than participants with a lower educational achievement.

## Psychological Predictors:

- Participants with poor body-image will have more favorable attitudes about and more interested in cosmetic surgery than participants with high bodyimage.
- Participants with low self-esteem will have more favorable attitudes about and more interested in cosmetic surgery than participants with high self-esteem.
- 10) Participants with lower rates of life-satisfaction will have more favorable attitudes about and more interest in cosmetic surgery than participants with higher rates of life satisfaction.
- 11) Participants who report lower rates of happiness will have more favorable attitudes about and more interested in cosmetic surgery than participants who report higher rates of happiness.

### **Relative and Interaction Effects**

In exploratory analyses, it is expected that there will be some interaction effects in the prediction of interest in cosmetic surgery and the attitudes about cosmetic surgery. For instance, a relatively young, white, female who is single and has more education may be more vulnerable than an older African-American female who is married and has lower educational attainment. Men in a relationship who have a higher socioeconomic status may also be more apt to be interested in and have more positive attitudes about cosmetic surgery.

Simultaneous regression analyses will be used to examine the unique predictive power of the constructs examined as predictors in this study. These analyses will guide the exploration of all possible interactions and meditational effects in predicting emerging adults' interest in and attitudes about cosmetic surgery.

#### Method

## **Participants**

One hundred and one females (59.4%) and sixty nine males (40.6%) participated in this study (in 2005-2006; total n = 170). Ages ranged from 18-48 (mean = 19.77, SD= 4.39). Although all participants were expected to be emerging adults, a subset of these participants (N = 5) were 30 or older. In addition, one participant (N = 1) did not report an age so was not included in the emerging adult sample. Thus, all analyses will be done considering the emerging adults sample (N = 164) and the entire sample (N = 170), which on average is 19 years old, but which includes some older adults. Fifty eight and a half percent of the participants identified as Euro-American, 12.4% as African American, 15.3% as Asian-American, 10.0% as Hispanic-American, and 3.5% identified as "other." The majority of participants were single (54.1%) while others were dating (41.2%), cohabitating with a partner (1.0%), or married (3.0%). Eighty-eight participants (51.8%) had completed high school (indicating that they had not completed any other education other than high school, but were likely enrolled in their first semester of college) at the time of the study, seventy-one (41.8%) had completed some college, ten (6.9%) had achieved an associate's degree, and one participant (0.6%) had earned a bachelor's degree. Please see Table 1 in the appendix for additional demographic information.

#### **Measures: Predictor Variables**

**Demographics**. Demographic variables such as age, gender, race, ethnicity, income, relationship status, and amount of hours spent watching reality television featuring cosmetic surgery were included in the participant's questionnaire packet (Please see Table 2 in the appendix for specific items). Height and weight were also self-reported

and used to compute BMI (average BMI = 25.05). See Table 1 for additional demographic information. Although self-reports of height and weight are imperfect, they are correlated over r = .90 with researcher-measured anthropometrics, thus were deemed acceptable for this study (Gorber, Tremblay, Moher, & Gorber, 2007; Lohman, Roche, & Martorell, 1998).

**Subjective happiness scale.** Participant's general level of happiness was assessed using the Subjective Happiness Scale (Lyubomirsky & Lepper, 1999). Participants answered four questions including, "In general, I consider myself *x*". Answers were recorded on a 7 point Likert scale with ratings of "1" indicating not being happy and ratings of "7" indicating being very happy. Reliability of this scale in this sample was Cronbach's alpha = .72.

Self-Esteem. Participants completed the Rosenberg self-esteem scale (Rosenberg, 1979). This measure is used to look at self-satisfaction, self-esteem, and self-worth. Answers were recorded as 1 = "strongly disagree", 2 = "mostly disagree", 3 = "mostly agree", or 4 = "strongly agree." Reliability for this scale in this sample was Cronbach's alpha = .87.

**Body image.** A pictorial measure was used to assess body image (Thompson, & Gray, 1995). Nine gender specific pictures were shown ranging from underweight to overweight. Participants were asked to identify the picture that they feel that they look like and which picture they'd like to look like. The difference in what the participant thought they looked like and what they wanted to look like indicated the extent of participants' body dissatisfaction. Scores could range from -8 (participants wanting to lose weight) to +8 (participants wanting to gain weight). Higher absolute scores meant

that there was more dissatisfaction present. In prior studies, researchers have found the test-retest reliability of this scale to be .79 (Markey & Markey, 2009).

Satisfaction with Life. The satisfaction with life scale (Diener, Emmons, Larsen, & Griffen, 1985) was a five question scale used to measure the participant's satisfaction with their life. Questions were answered on a 7 point Likert scale with answers ranging from 1 = "strongly disagree" to 7 = "strongly agree". Some questions were "In most ways my life is close to my ideal" and "I am satisfied with my life". Reliability for this scale in this sample was Cronbach's alpha = .871.

### **Measures: Outcomes**

Attitudes towards altering physical appearance. The attitudes towards cosmetic surgery scale consisted of 25 questions indicating positive and negative attitudes towards obtaining plastic surgery. Questions included items such as "I think it is appropriate for adults to alter their physical appearance dramatically through cosmetic plastic surgery" and "I think that people undergo plastic surgery usually feel better about themselves afterwards." This measure was created by the researchers of the study (see Markey & Markey, 2009). This scale was created using procedural information from the American Society of Plastic Surgeons website (ASPS, 2008) as well as information from Sarwer's (2000; 2009) research on cosmetic surgery. Reliability for attitudes concerning surgery was .657. Analyses did not distinguish distinct scales for positive and negative attitudes about surgery, thus all items were considered together as an overall indicator of attitudes towards surgery.

Interest in cosmetic surgery. Interest in cosmetic surgery was assessed using a 28 question survey concerning how likely or unlikely a participant was to obtain a

specific surgery. This survey included a variety of procedures (e.g., facelift, liposuction, breast augmentation, etc.) and participants responded on a 5 point Likert scale to indicate the degree to which they would consider the procedure (1 = I would never consider this procedure to 5 = I would definitely consider this procedure). Reliability for participant interest in specific surgeries was Cronbach's alpha =.895.

## Procedure

Participants were recruited from a northeastern university near Philadelphia. Participants were required to be at least 18 years of age and were required to speak and write fluently in English. Participants were first asked a series of questions pertaining to their background (i.e. age, income, education, height, etc.). The subsequent questionnaires pertained to body image, happiness, life satisfaction, and attitudes concerning plastic surgery. Small groups were invited to a private laboratory and completed surveys administered by trained research assistants. Participants signed a consent form and were given class credit for an introduction to psychology class. The study was approved by the IRB at the institution where the research took place.

## Analytic Plan

The data will be analyzed to determine individual and simultaneous predictors of emerging adults' attitudes towards and interested in cosmetic surgery. Pearson correlations will first be used to determine correlations between all the predictors in the study (age, gender, life-satisfaction, education, relationship status, ethnicity, happiness, body image, self-esteem, and television viewing) and the constructs conceptualized as outcomes in this study (interest in and attitudes about cosmetic surgery). After correlations are performed, simultaneous, linear regression analyses will be conducted to predict the combined and unique variance in attitudes about and interest in cosmetic surgery that are explained by the eleven predictors examined in this study.

Additional exploratory analyses will be conducted, should initial analyses indicate a reason to do so. Specifically, interactions among predictor variables will be examined to determine whether variables interact to predict attitudes about or interest in surgery (e.g., age and gender interact to predict our outcome variables). If correlational analyses indicate reason to, meditational analyses will also be pursued (e.g., does body image mediate the relation between life-satisfaction and interest in cosmetic surgery?). Since these analyses utilize archival data, a wide range of variables can be considered, but no additional data will be collected for this study.

#### **Results**

In order to address Hypothesis 1, that there would be a difference in men's and women's interest in and attitudes about cosmetic surgery, an independent samples t-test was conducted. In contrast to my hypothesis, men (M = 40.54, SD = 9.62) and women (M = 42.16, SD = 10.86) did not significantly differ in their attitudes about cosmetic surgery (t (166) = -.999, p = .32). However, men (M= 18.03, SD = 3.56) and women (M = 24.44, SD = 9.55) did score significantly different in their interest in obtaining cosmetic surgery (t (163) = -5.281, p = .000) with women being more likely to be interested in cosmetic surgery. These analyses were then done including only the emerging adults in the sample (i.e., excluding participants who were aged 30 and above), the same results were obtained. Men (M = 40.41, SD = 9.63) and women's (M = 41.78, SD = 10.86) attitudes about cosmetic surgery were not significantly different (t (160) = -.827, p = .409). Further, emerging adult men (M = 18.00, SD = 3.58) and women's (M = 24.01, SD = 9.27) interest in obtaining cosmetic surgery was significantly different (t (157) = - 5.037, p = .000).

In order to examine Hypothesis 2, correlation analyses were used. Consistent with my hypothesis, a significant, positive correlation between age and attitudes about cosmetic surgery was found r = .18, p < .05. Similarly, a significant, positive correlation was found between age and interest in obtaining cosmetic surgery, r = .25, p < .005. These analyses were then conducted focusing only on the emerging adults in the sample and similar findings emerged. Age and attitudes about cosmetic surgery were positively (although not significantly) correlated, r = .13, p = .107. A positive (although not significantly) correlated, r = .13, p = .107. A positive (although not significantly) correlated, r = .13, p = .107. A positive (although not significantly) correlated and interest in obtaining cosmetic surgery was also found r = .10, p = .203.

In order to address Hypothesis 3, a one-way between groups analysis of variance was conducted to determine if there were ethnic differences in attitudes about or interest in cosmetic surgery. There were six ethnic groups identified: Group 1 =African-Americans, Group 2 = Euro-Americans, Group 3 = American Indians, Group 4 = Asian Americans, Group 5 = Hispanic Americans, and Group 6 = Other. There were no statistically significant differences for the six groups in either attitudes about, F(4, 163) =.84, p = .5, or interest in cosmetic surgery, F(4, 160) = 1.38, p = .245 (African American M = 21.45; Euro-American M = 21.72; Asian American M = 19.38; Hispanic M = 25.06; Other M = 24.67). A one-way between groups analysis of variance examining only the emerging adults' potential ethnic differences in attitudes about and interest in cosmetic surgery was also conducted. There were no statistical differences for the six groups in either attitudes about, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, p=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, P=.373 or interest in cosmetic surgery, F(4, 157) = 1.070, F(4, 157) = 1.070, F(4, 157) = 1.070, F(4,154) = 1.581, *p*=.182 (African American M = 20.78; Euro-American M = 21.29; Asian American M = 19.38; Hispanic M = 25.06; Other M = 24.67). Figures 1 and 2 contain mean scores of all groups for the full and emerging adult sample.

In order to examine Hypothesis 4, a one-way between groups analysis of variance was again utilized to determine if there were differences in attitudes about or interest in cosmetic surgery among relationship status groups. There were three groups: Group 1= Single, Group 2 = Dating and Cohabitating, and Group 3 = Married. There were no statistical differences for the three groups in attitudes about cosmetic surgery, F (2, 165) = 2.11, p= .124, but a significant difference was found in interest in cosmetic surgery, F (2, 162) = 4.449, p = .013. Participants who were married exhibited a much higher interest in cosmetic surgery than other groups for both the entire sample (married M =

31.5, single M = 21.45, dating and cohabitating M = 21.41). Tukey's post hoc test further shows this in that Group 1 (Single) and Group 2 (Dating and Cohabitating) are both significantly different from Group 3 (Married) at the p < .05 level. A one-way between groups analysis of variance examining the potential differences in relationship status among only emerging adults in regards to attitudes about and interest in cosmetic surgery showed no statistical differences for both attitudes about, F(2, 159) = 1.761, p=.175, or interest in cosmetic surgery, F(2, 156) = 2.147, p=.120 (married M = 33, single M = 21.27, dating and cohabitating M = 21.41). Figures 3 and 4 contain the mean scores for the relationship status groups examined for the full sample and the emerging adult sample.

In order to address Hypothesis 5, correlations between BMI (body mass index) and attitudes about and interest in cosmetic surgery were performed. No significant correlations were found between BMI and attitudes about cosmetic surgery (r = .000, p = .99 for the entire sample; r = -.014, p = .861 for emerging adult subsample). Further, no significant correlations were found between BMI and interest in obtaining cosmetic surgery (r = .088, p = .262 for the entire sample; r = .082, p = .305 for emerging adult subsample).

In order to address Hypothesis 6, correlation analyses were conducted to examine relations between participants' TV watching habits and their attitudes about and interest in obtaining cosmetic surgery. Modest, significant correlations were found between participants' TV watching habits and their attitudes about cosmetic surgery, r = .234, p = .007. Similarly, a nearly significant relation was found between TV watching habits and interest in obtaining cosmetic surgery, r = .156, p = .079. When these analyses were

done including only the emerging adult subsample significant relations were found for both attitudes about cosmetic surgery (r = .244, p = .006) and interest in cosmetic surgery (r = .182, p = .043).

The last hypothesis (Hypothesis 7) pertaining to demographic predictors of attitudes about and interest in cosmetic surgery examined participants' educational background. No significant associations were found between years of education and attitudes about cosmetic surgery (r = .040, p = .610 for entire sample, r = .028, p = .721 emerging adult subsample). Further, no significant associations were found between years of education and interest in obtaining cosmetic surgery (r = .103, p = .187 for entire sample; r = .065, p = .418 for emerging adult subsample).

In order to address Hypotheses 8 through 11, pertaining to the potential psychological correlates of interest in and attitudes about cosmetic surgery, correlations were conducted. The results of these correlations can be seen in Table 3. Below the diagonal are correlations for the entire sample and above the diagonal are correlations for the subsample of emerging adults. Results indicate that body image, life satisfaction, and self-esteem were all related to participants' attitudes about cosmetic surgery among the entire sample. Among the emerging adults subsample, body image, self-esteem, and happiness were all associated with participants' attitudes about cosmetic surgery.

Participants' interest in obtaining cosmetic surgery was related to their body image, life satisfaction, self-esteem and happiness; this was true for the entire sample and the subsample of emerging adults.

Next, simultaneous regression analyses were run to determine the unique variance explained by the demographic variables and psychological variables in predicting participants' attitudes about and interest in cosmetic surgery. In the entire sample, unique variance in attitudes about cosmetic surgery was explained by age, the amount of television watched, and life satisfaction. Unique variance in interest in cosmetic surgery was explained by age, gender, and body satisfaction. In the emerging adult sample, unique variance in attitudes about cosmetic surgery was explained by the amount of television watched and life satisfaction. For interest in cosmetic surgery, unique variance was explained by gender, body satisfaction, and happiness. Results of these regressions can be seen in Tables 4 through Table 9.

Next, analyses were conducted to determine whether there were any interactions among the demographic and psychological variables in predicting participants' attitudes about and interest in cosmetic surgery. One significant interaction was found between age and the amount of reality television viewed. This interaction is depicted in Figure 5. The interaction reveals that older participants were likely to be interested in cosmetic surgery regardless of the amount of television they watched, whereas younger participants were more likely to want cosmetic surgery as the amount of reality television they watched increased. This interaction was found when the entire sample was considered, but when controlling for the subsample of emerging adults, this interaction was not found.

#### Discussion

The purpose of this study was to examine possible factors associated with individuals' attitudes about and interest in cosmetic surgery. Seven demographic predictors were examined: age, gender, ethnicity, relationship status, BMI, television consumption, and education. Four psychological predictors were also examined: life satisfaction, self-esteem, life satisfaction, and body image. Two sets of analyses were run for each predictor to include the entire sample, and to focus on only the emerging adults in the sample.

For hypothesis one, I predicted that women would be more interested in and have more positive attitudes about cosmetic surgery than men. For both groups, the entire sample and emerging adults only, analyses showed that gender did not predict participants' attitudes about cosmetic surgery. However, women were more interested in actually obtaining cosmetic surgery than men. Because more men are reporting having had surgery or having consults for surgery, men's and women's attitudes may be becoming more similar about surgery (Thorpe, Ahmed, & Steer, 2004). Although there may be differences between men and women in their motivation for surgery (Davis, 2002), surgery is becoming more acceptable to both genders. In this sample, it appears that although there is no difference in gender in how participants view cosmetic surgery, women are still more likely to be interested in obtaining cosmetic surgery. This could also be in part because women are more subject to objectification and are more likely to feel pressure to maintain certain standards of beauty than are men (i.e. being thin, yet voluptuous; Gervais, Vescio, Forster, Maass, Suitner, 2012; Vries & Peter, 2013). In the emerging adult sample, this could also be attributed to the fact that emerging adults are

going through a vulnerable and impressionable period in their life where others (particularly, those of the opposite sex) are likely to evaluate their appearance (Arnett, 2000; Arnett, 2007).

For my second hypothesis, I expected that there would be a positive linear relationship in that as age went up, so would interested in and attitudes about cosmetic surgery. For the entire sample, results revealed a positive association between both attitudes about and interest in cosmetic surgery and age. However, when we examined only the emerging adults, there was also a positive relationship between age and interest in and attitudes among cosmetic surgery, but this association was not statistically significant. This is, in part, likely due to the fact that when the age range is truncated and variance reduced, the likelihood of producing a significant finding is also reduced. The emerging adults in this sample may be trying to "find themselves" (Arnett, 2007). However, perhaps, these young people who are searching for their identity may be more concerned about the internal aspects of themselves then the physical ones. Perhaps as people age, they believe they have "found" themselves and begin to focus on their more aesthetic self in particular as that aesthetic self may no longer meet the cultural ideals of beauty, which values youth. The emerging adults may also be a relatively healthy group, focused on love, work, and worldviews (Arnett, 2000). As noted in Kinnunen's work (2010), older people are now looking for physical alterations in order to achieve a "second youth." It is believed that once a person breaks into their 40's and 50's, they begin to experience skin accumulation (i.e., a double chin) and other "unattractive" sights which can be corrected via surgery (Grant, 2012).

For the third hypothesis, I predicted that there would be a significant difference between the ethnic groups in this sample in terms of their interest in and attitudes about cosmetic surgery. However, findings revealed that there was not a significant difference across ethnic groups for both the entire sample and the emerging adult subsample. This may be, in part, explained by the fact that every year, a larger group of minority and ethnically diverse individuals are reporting acquiring cosmetic surgery (Prendergast et al., 2011). This is one of the first studies to compare a variety of groups, as past research has focused on primarily European Americans. Data continues to suggest that individuals around the world are now turning to cosmetic surgery (Holliday & Elfving-Hwang, 2012) and this study supports the possibility that young people of varying ethnic backgrounds will pursue cosmetic surgery.

For hypothesis four, I predicted that those not in a committed relationship would have a higher interest in and more positive attitudes concerning cosmetic surgery. For the entire sample, significant differences were found for interest in cosmetic surgery, but not for attitudes about cosmetic surgery. Post-hoc comparisons using the Tukey HSD test shows that single participants and cohabitating participants did not differ, but that these two groups did differ from married participants in that married participants were more interested in obtaining cosmetic surgery. There were no significant differences in relationship status found for the emerging adult sample. Some past research suggests that single people may be more interested in cosmetic surgery, and a "survival of the fittest" explanation for interest in cosmetic surgery has been offered in that cosmetic surgery may help individuals compete for mates (Frederick, Lever, & Peplau, 2007). However, other researchers have found that married persons are more frequent customers of cosmetic surgery (Schlessinger, et. al, 2010). This could be in part due to the fact that married persons may be older than single persons and may be a part of two income families with additional financial resources (DePaulo, 2007). Further, women who have children often report unwanted physical side effects after having children and may pursue surgery to rectify these effects (Dube, 2013).

For the fifth hypothesis, I predicted that as BMI went up, so would interest in and attitudes about cosmetic surgery. This hypothesis was not supported for either sample (the entire sample or the emerging adult subsample) or for either outcome variable, attitudes about or interest in cosmetic surgery. Some research has suggested that BMI may in fact not be connected to cosmetic surgery interest or attitudes about surgery (Swami, 2009). For instance, some research has found that interest in cosmetic surgery is driven by psychological concerns, which may not be related to a relatively objective indicator of physical appearance such as body size (Labow, 2013). It also may be that a higher BMI is correlated with bariatric surgery, something that is deemed as more medical (and less cosmetic) in that it is obtained by the morbidly obese to promote health. The National Institution of Health (NHS Choices, 2012) reported that gastric bypass surgery has gone up 530% in less than a decade. This increase parallels increases in obesity in 2012; 78 million people were considered overweight or obese (Hellmich, 2013). Unfortunately, a larger body size is now the norm for most people. The U.S. also has larger standards for clothing than in other countries and U.S. standards are also adapting to the "growing" population. For example, people wearing a size "0" today, would be wearing a size "8" 60 years ago (Discovery Fit, 2012). Regardless, it appears that BMI and cosmetic surgery were not linked in the present study.

The sixth demographic predictor I examined was television consumption. I expected that as television consumption went up, so would attitudes about and interest in cosmetic surgery. For both groups, the entire sample and emerging adults, there was indeed a positive relationship between television consumption and interest in and attitudes about cosmetic surgery, such that those who watched more television demonstrated more interest in and more positive attitudes about cosmetic surgery. Many studies over the years have shown that the media can negatively affect a person's health behaviors, including encouraging behaviors and procedures to alter their body to achieve what society views as beautiful (Markey & Markey, 2010; Ricciardelli & Clow, 2009). The media also appears to contribute to the objectification of people, particularly women (Calgero, Pina, Park, & Rahemtulla, 2010; Park, Calgero, Harwin, & DiRaddo, 2009). The media has also been shown to shape or cultivate a person's idea about what the norms are leading to changes in people's sense of reality (Markey & Markey, 2011; Nabi, 2009; Schooler, Ward, Merriwether, Caruthers, 2004). Thus, it is not surprising that media consumption is linked with a favorable attitude about cosmetic surgery and a greater desire to pursue cosmetic surgery.

The last hypothesis pertaining to demographic predictors was that participants with a higher education would be more interested in cosmetic surgery and have more positive attitudes about cosmetic surgery. For both the entire sample and the emerging adult subsample, there were no significant relations found between educational attainment and interest in and attitudes about cosmetic surgery. Past research has indicated that a higher SES would contribute to an increased interest in cosmetic surgery; this study has used education as a proxy for SES, given the student population examined and the limited range of incomes among these participants (Prendergast et. al, 2011). However, in 2013, education does not always equal a job, and knowing this, many surgical centers are offering low cost payment options to customers (Didie & Sarwer, 2003; Prendergast et al., 2011). Other studies have also found that those obtaining cosmetic surgery are coming from diverse socioeconomic backgrounds (Didie & Sarwer, 2003; Slevec & Tiggemann, 2010). Further, if you Google "how to save for cosmetic surgery", 2,110,000 results show up including how to pay for, finance, and save by cutting costs. This helps make cosmetic surgery more easily accessible and obtainable. It appears that education and SES may be less and less likely to be linked with cosmetic surgery in the future and as indicated in the present study.

My eighth hypothesis was that as body image decreases, interest in and attitudes about cosmetic surgery will increase. Our body image measure assessed participants' dissatisfaction with their body image (i.e., as the body image score grew larger, there was more dissatisfaction). Results showed a positive linear relationship in that as body dissatisfaction grew interest in and attitudes about cosmetic surgery increased for both the entire sample and emerging adult subsample. Past research shows that some cosmetic surgery patients have unrealistic perceptions of their body (Thorpe, Ahmed, & Steer, 2004), or body distortion. This could be contributing to participants' interest in and attitudes about cosmetic surgery in that the more dissatisfied and distorted they feel their body is, the more likely they are to seek a means to fix this. Results are indicative of the research literature and provide further support that poor body image is related to higher interests and attitudes towards cosmetic surgery (Menzel et al., 2011). Predictions were made that as self-esteem increased attitudes about and interest in cosmetic surgery would decrease. Both correlations for the entire sample were significant; there was a negative relationship. When examining just the emerging adults in the sample, the results remained the same. The results from this study support previous research suggesting that many patients who seek cosmetic surgery have low self-esteem (Goering, 2011; Ricciardelli & Clow, 2009). Many patients feel that by seeking cosmetic surgery, their self-esteem will be improved (Goering, 2011] Ricciardelli & Clow, 2009). However, research is finding that self-esteem is not necessarily increased by obtaining plastic surgery (Ehrenfeld, 2012). Thus, additional research should help to clarify the longitudinal link between self-esteem and cosmetic surgery. Current research suggests that a superficial exterior fix may not ultimately change how people feel about themselves permanently (Markey & Markey, 2009).

For my tenth hypothesis, I predicted that as life-satisfaction increased, interest in and attitudes about cosmetic surgery would decrease. For the entire sample, this association was significant; as life-satisfaction increased, interest in and attitudes about cosmetic surgery decreased. Again, when focusing on only emerging adults, the results were the same and both correlations were significant and negative. This result parallels findings in the literature examining happiness; research suggests that the happier you are internally, the less likely you are to want to change anything externally (Ambro & Wright, 2010; Soest et al., 2012). It's possible too that people who are happier in life overall, are less influenced by both experiences of objectification and the media's tendency to cultivate unrealistic beauty ideals (Frederickson & Roberts, 1997; Markey & Markey, 2011; Nabi, 2009; Ricciardelli & Chow, 2009; Schooler et al., 2004). Related, for my last hypothesis, I predicted that as happiness increased, interest in and attitudes about cosmetic surgery would decrease. For the entire sample, there was a significant association between happiness and interest in cosmetic surgery; as happiness increased, participants were less likely to be interested in obtaining cosmetic surgery. However, although there was a negative relationship between happiness and attitudes about cosmetic surgery, this relation was not significant. As with the previous three psychological predictors, results did not change when focusing on only emerging adults. Past research has indicated that close to 70% of patients seeking cosmetic surgery are depressed (Ambro & Wright, 2010) and that depression is a good predictor of cosmetic surgery (Soest et al., 2012). Our results suggest that when individuals are happy their interest in cosmetic surgery decreases. This could be because patients feel that cosmetic surgery is a quick fix, and will make them feel better and achieve their desired happiness. However, there is little empirical support for the notion that getting a nose job will sufficiently help you through your last break up.

After examining single predictors, analyses were conducted to consider the relative importance of these predictors in explaining variance in participants' attitudes about and interest in cosmetic surgery. Because ethnicity was a categorical variable and it was not related to the outcomes examined, it was left out of these simultaneous regression analyses. When considering the demographic predictors together, I found that age and television consumption remained unique predictors of participants' attitudes about cosmetic surgery (these analyses controlled for all other predictors in the sample in terms of their predictive power). Age and gender were significant, unique predictors of interest in cosmetic surgery for the entire sample. When just the emerging adults were

considered, television consumption uniquely predicted attitudes about cosmetic surgery and gender was a unique predictor of interest in cosmetic surgery.

Analyses were then run in order to consider the psychological predictors. Simultaneous regression analyses were again used in order to look at the variance in participant's attitudes about and interest in cosmetic surgery. When looking at the entire sample, I found that life satisfaction was a unique predictor of attitudes about cosmetic surgery and that happiness and body satisfaction were unique predictors of interest in cosmetic surgery. When looking at only emerging adults, life satisfaction again was a unique predictor of participants' attitudes about cosmetic surgery and both happiness and body satisfaction were unique predictors of interest in cosmetic surgery.

Building on these findings, analyses were then done to consider possible interactions between demographic and psychological predictors of attitudes about and interest in cosmetic surgery (interactions were examined for variables that produced main effects in the simultaneous regression analyses). Only one significant interaction emerged in these data; age and television consumption interacted in predicting interest in obtaining cosmetic surgery. Among the older participants in this sample, television consumption did not seem to impact their interest in obtaining cosmetic surgery. However, among the younger participants, as television consumption increased, interest in cosmetic surgery increased. This finding may be due to the fact that older individuals feel more concerned about their aging appearance and do not need a television show to highlight their insecurities. However, among younger participants, larger amounts of television consumptions may make them interested in something they wouldn't otherwise be interested in (i.e., cosmetic surgery). Advertising research shows that young adults are currently being targeted by media (Dale, 2009). The rationale behind this is that the baby boomers, a large group that was recently of interest to marketers, has had children, who are now old enough to be consumers. This presents a large market, which means a lot of money can be made by marketing products and procedures to this demographic (Dale, 2009). Television has also been described as a social motivator for young adults (Menzel et al., 2011), meaning that they are likely to attempt the behaviors and actions they view on television. It is important to consider these findings in the context of the landscape of reality television. In 2012, not only were there more reality shows than ever, but these shows seem to have no "filter," making 2012 the most extreme reality television year to date (Genzlinger, 2012). The cultivation theory may be evident, with many consumers reporting feeling worse about themselves following exposure to reality shows and a desire to be more like their "favorite character" (Genzlinger, 2012; Markey & Markey, 2011; Nabi, 2009; Schooler et. al, 2004). With cosmetic surgery shows in particular, research has shown that participants report feeling as though they have learned about plastic surgery from watching these shows, which could lead to faulty and incomplete knowledge and therefore poor decision-making when exploring cosmetic surgery (Crockett, Pruzinksy, & Persing, 2007). An additional explanation for the interaction found between age and television consumption concerns the amount of viewing and the way media is viewed by different age groups. Research shows that about 34 hours a week is spent watching TV, with consumption increasing when individuals reach their 20s (Hinckley, 2012). While older people also watch TV, younger people are finding new ways to watch including the use of ipads, cell phones, laptops, and DVRs (Stelter, 2012). The wider use of gadgets makes consumption more accessible; individuals can watch

reality television in the palm of their hand anywhere they desire (Stelter, 2012). With consumption rising and accessibility increasing among younger consumers in particular, it makes sense that television would have more of an impact on younger viewers. These viewers may also be more vulnerable and susceptible to the influence of the media and eager to conform to society's ideals.

#### Limitations

There are several limitations worth noting about this study. First, the data was collected in 2005-2006, two to three years before the economic crisis of 2008 and seven years prior to the completion of this thesis. The economic landscape of American has changed since this data was collected, which may impact current predictors of attitudes about and interest in cosmetic surgery. However, it should be noted that in spite of the depressed economy, rates of cosmetic surgery obtainment have continued to rise since 2008 (APSP, 2013).

This study was limited to college students, many of whom (although not all) were experiencing emerging adulthood. Thus, this study allows for an investigation of these issues among a relatively young adult sample, but does not allow for a full consideration of changes in interest in and attitudes about cosmetic surgery across adulthood. Given the protocol utilized, there was no way to contact these students to do longitudinal data collection, which would have provided a greater understanding of age and circumstantial correlates of attitudes about and interest in cosmetic surgery. These data were all collected via self-report instruments, and studies have shown that self-report data may be imperfect due to self-presentation and other biases. However, attitudes and interests are difficult to obtain via another method; other-rater reports are unlikely to be more accurate than self-reports. Finally, it is important that these results are replicated with a more diverse group in order to ensure generalizability to all populations.

#### Implications and Conclusions

This study could have serious implications for cosmetic surgery patients in the future. By targeting predictors that may influence a patient to seek cosmetic surgery, we may be able to evaluate those patients, and assure that they are psychologically healthy and will significantly benefit from cosmetic surgery via realistic goals. This study could also help to ensure the importance of having a psychological consult with all cosmetic surgery patients, using the identifiers in this study as key considerations. This may help to protect against the unwanted, deleterious side effects that sometimes occur after surgery when patients realize that fixing the "outside" didn't really change the "inside" (i.e.,how they feel about themselves). As has been noted in past research, negative consequences of surgery can include increases in depression and risk of suicide (Sarwer, Brown, & Evans, 2007). By screening patients using assessments of self-esteem and happiness, interventions such as therapy may be used in order to make sure that patients are psychologically stable.

This study revealed the tendency for emerging adults (and older adults) to view cosmetic surgery favorably and express some interest in surgery. If surgery were a riskfree undertaking, this would not necessarily be concerning. However, surgery always poses risks including anesthetic complications, scarring, and blood clots; unnecessary surgery (i.e., cosmetic surgery) carries all these risks as well as psychological risks. With television having a large impact on participants, especially on emerging adults, many consumers may be turning to cosmetic surgery in order to become more like a media figure. Unfortunately, it is near impossible to replicate a person's physical being, and consumers may never achieve the "look" they desire. This could, in turn, result in repeat consumers, with one surgery turning into multiple surgeries. The risks that media consumption presents, mainly unobtainable ideals, is a striking finding worthy of additional research among emerging adults.

The purpose of this study was to examine demographic and psychological predictors of interest in and attitudes about cosmetic surgery among (primarily) young adults. This study revealed that gender, age and relationship status were significant predictors of interest in obtaining cosmetic surgery. Age and television consumption were found to predict the attitudes towards cosmetic surgery in the entire sample. Body image, life satisfaction, and self-esteem were all significant predictors of attitudes about and interest in cosmetic surgery. When considering only the emerging adults in this sample, gender and television consumption were significant predictors of interest in cosmetic surgery, while television consumption alone was significant in predicting attitudes about cosmetic surgery. Further, body image, self-esteem, and happiness were significant predictors of emerging adults' interest in and attitudes about cosmetic surgery. Age and television consumption interacted in predicting attitudes about cosmetic surgery. Taken together, these findings increase our understanding of factors that may prompt individuals to view cosmetic surgery favorably and even pursue surgery. With surgery rates continuing to rise and serious risks associated with elective surgeries, understanding these factors is of increasing importance. Interventions aimed at dissuading individuals from acquiring surgery if there is reason to believe that they will not benefit from surgery may

be based on the present findings. Ultimately, the goal of research such as this is to determine why young adults pursue cosmetic surgery and the likely result of that pursuit.

## Demographic Information for Entire Sample by Gender

	Female	Male
Total	101	69
Mean Age	19.995	19.44
Ethnicity		
Euro American	56 (32.94%)	44 (25.88%)
African American	15 (8.82%)	6 (3.53%)
Asian American	15 (8.82%)	11 (6.47%)
Hispanic	12 (7.05%)	5 (2.94%)
Other	3 (1.76%)	3 (1.76%)
Relationship Status		
Single	48 (28.24%)	44 (25.88%)
Dating	46 (27.06%)	24 (14.12%)
Cohabitating	2 (1.17%)	0 (0%)
Married	5 (2.94%)	1 (0.59%)
Highest Educational Attainment		
12 <sup>th</sup> grade	51 (30%)	37 (21.76%)
Some college	42 (24.71)	29 (17.06%)
Associates Degree	9 (5.29%)	1 (0.59%)
Bachelor's Degree	1 (0.59%)	0 (0%)
BMI		
Below 18.5 (Underweight)	4 (2.35%)	2 (1.17%)
18.5-24.9 (Average)	66 (38.82%)	36 (21.18%)
25.0-29.9 (Overweight)	12 (7.05%)	16 (9.41%)
30.0 and Above (Obese)	17 (10%)	15 (8.82%)
Makeover TV Viewing		
Never	14 (8.24%)	15 (8.82%)
Once or Twice	26 (15.29%)	27 (15.88%)
Three to Six Times	25 (14.71%)	18 (10.59%)
Once a Month	19 (11.18%)	7 (4.12%)
Once a Week	17 (10%)	2 (2.94%)

Sample of Demographic/Background Questions

Sample Questions

How old are you now (in years)?

What is your gender?

What is your ethnicity? (Fixed response)

Are you currently? (Fixed response for relationship status)

How tall are you?

How much do you weight?

What is your highest educational attainment? (Fixed response)

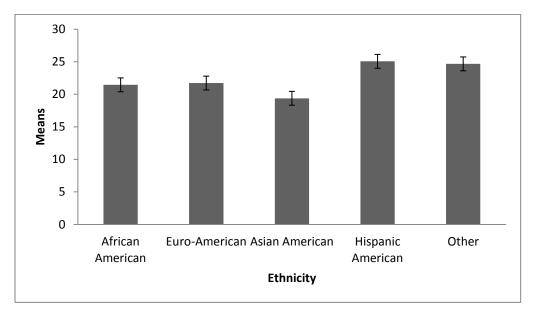
### Correlations of Psychological Predictors in Attitudes about and Interest in Cosmetic

### Surgery

	Cosmetic Attitudes	Cosmetic Procedures	Happiness	Body Image	Life Satisfaction	Self Esteem
Cosmetic Attitudes	-	.429*	129	.178***	235***	156***
Cosmetic Procedures	.440	-	350*	.385*	274**	218***
Happiness	115	342*	-	308*	.667*	.653*
Body Image	.192*	.381*	288*	-	154	324*
Life Satisfaction	247*	312*	.674*	142	-	.551*
Self- Esteem	164***	251**	.644*	319*	.554*	-
***p < .001		** p	<.01		* p	< .05

Note: The bottom diagonal represents the correlation for the entire sample. The top diagonal represents the correlations for the emerging adults

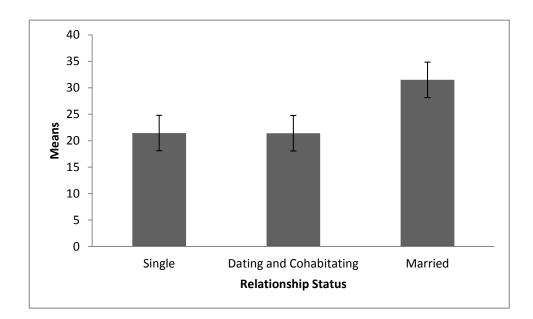
Interest in Cosmetic Surgery among Ethnic Groups (Entire Sample)



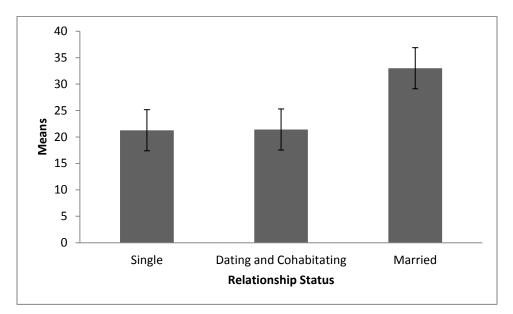
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Interest in Cosmetic Surgery among Ethnicity (Emerging Adults)

Interest in Cosmetic Surgery among Relationship Status (Entire Group)



Interest in Cosmetic Surgery among Relationship Status (Emerging Adults)



Simultaneous	Regression	Analysis	Predicting	<i>Cosmetic</i>	Surgerv	(Entire	Sample)
5	1.00.000000	11.0000 / 500		0000000	~	12.000.0	<i>compre</i> )

	Cosmetic Surgery		
	В	SE B	β
Attitudes About			
Age*	0.522	0.247	0.037
Gender	0.014	1.918	0.994
Ethnicity	0.706	0.676	0.298
Relationship Status	1.044	1.799	0.563
BMI	-0.041	0.17	0.81
TV watching**	2.41	0.918	0.01
Education	-0.138	0.587	0.815
Interest In			
Age*	0.43	0.181	0.019
Gender***	-6.56	1.417	0.00
Ethnicity	0.764	0.5	0.129
Relationship Status	-0.112	1.335	0.933
BMI	0.139	0.126	0.271
TV watching	0.291	0.685	0.672
Education	0.53	0.435	0.903
***p < .001 ** p < .01	* ]	p < .05	

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Simultaneous	negression	πιαινδιδ	1 100		Cosmenc	SUISEIV	Linersing	лишы

		Cosmeti	c Surgery
	В	SE B	β
Attitudes About			
Age	0.662	0.578	0.254
Gender	0.322	1.955	0.869
Ethnicity	0.657	0.697	0.348
<b>Relationship Status</b>	1.294	1.877	0.492
BMI	-0.064	0.173	0.71
TV watching*	2.425	0.933	0.011
Education	-0.325	0.647	0.617
Interest In			
Age	0.232	0.418	0.581
Gender***	-6.103	1.426	0.00
Ethnicity	0.782	0.509	0.128
Relationship Status	0.096	1.373	0.944
BMI	0.136	0.126	0.284
TV watching	0.411	0.688	0.551
Education	0	0.476	1

\*\*\*p < .001

\*\* p < .01

\* p < .05

### Simultaneous Regression Analysis Predicting Cosmetic Surgery (Entire Sample)

			Cosmetic	Surgery
		В	SE B	β
Attitudes	About			
	Happiness	0.379	0.282	0.18
	Life Satisfaction**	-0.49	0.171	0.005
	Self-Esteem	-0.094	0.223	0.673
	Body Image	0.938	0.567	0.1
Interest In	1			
	Happiness	-0.314	0.214	0.145
	Life Satisfaction	-0.214	0.128	0.097
	Self-Esteem	0.049	0.166	0.769
	Body Image**	1.375	0.425	0.002

\*\*\*p < .001 \*\* p < .01 \* p < .05

Simultaneous	Regression	Analysis	Predicting	Cosmetic	Surgery	(Emerging Adu	ılts)

Attitudes About Happiness <sup>*</sup>	<b>B</b>	SE B	β
Happiness	× _0 <i>4</i> 31	0.155	
11	· _0.431	0 1 5 5	
	-0.431	0.177	0.016
Life Satisfa	action -0.07	0.231	0.763
Self-Esteer	n 0.788	0.603	0.194
Body Imag	e 0.26	0.296	0.382
Interest In			
Happiness	-0.122	0.127	0.338
Life Satisfa	action 0.132	0.164	0.423
Self-Esteer	n** 1.325	0.434	0.003
Body Imag	e* -0.463	0.216	0.034

### Simultaneous Regression Analysis Predicting Cosmetic Surgery (Entire Sample)

		Cosmetic Su	rgery
	В	SE B	β
Attitudes About			
Age	0.351	0.253	0.167
Gender	0.982	2.064	0.635
Ethnicity	0.775	0.662	0.244
Relationship Status	2.339	1.819	0.201
BMI	-0.194	0.208	0.355
TV watching*	0.2169	0.901	0.018
Education	-0.304	0.597	0.61
Happiness	0.205	0.331	0.537
Life Satisfaction*	-0.463	0.204	0.025
Self-Esteem	-1.51	0.242	0.529
Body Image	0.762	0.831	0.361
Interest In			
Age	0.336	0.177	0.06
Gender**	-4.594	1.459	0.002
Ethnicity*	0.991	0.47	0.037
Relationship Status	1.078	1.291	0.405
BMI	-0.096	0.147	0.516
TV watching	-0.023	0.644	0.971
Education	-0.239	0.421	0.572
Happiness	-0.392	0.235	0.098
Life Satisfaction	-0.249	0.143	0.085
Self-Esteem	0.085	0.17	0.617
Body Image	1.094	0.585	0.064

\*\*\*p < .001

\*\* p < .01

\* p < .05

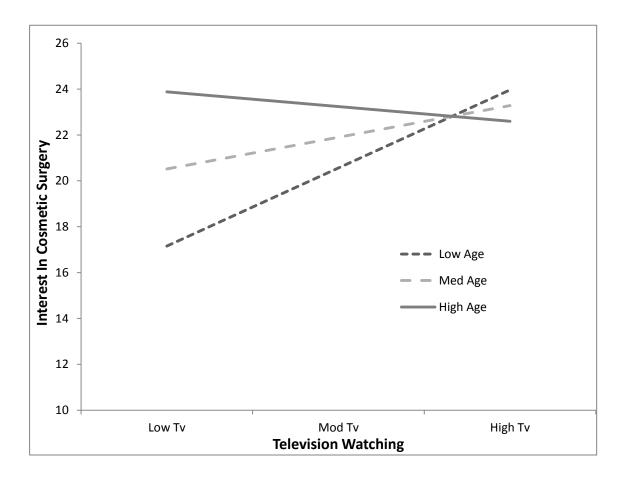
### Simultaneous Regression Analysis Predicting Cosmetic Surgery (Emerging Adults)

		Cosmetic S	Surgery
	В	SE B	β
Attitudes About			
Age	0.375	0.577	0.517
Gender	1.131	2.101	0.592
Ethnicity	0.769	0.684	0.263
Relationship Status	2.756	1.924	0.155
BMI	-0.2	0.21	0.344
TV watching*	2.142	0.92	0.022
Education	-0.44	0.654	0.503
Happiness	0.189	0.335	0.573
Life Satisfaction*	-0.469	0.206	0.025
Self-Esteem	-0.142	0.245	0.562
Body Image	0.636	0.854	0.458
Interest In			
Age	-0.009	0.399	0.982
Gender**	-4.201	1.466	0.005
Ethnicity*	1.502	0.479	0.03
<b>Relationship Status</b>	1.401	1.347	0.3
BMI	-0.101	0.147	0.493
TV watching	0.052	0.65	0.937
Education	-0.207	0.547	0.651
Happiness	-0.385	0.235	0.104
Life Satisfaction	0.262	0.143	0.07
Self-Esteem	0.118	0.17	0.49
Body Image	1.107	0.593	0.064

\*\*\*p < .001

\* p < .05

#### The Interaction of Television Consumption and Age on Interest in Cosmetic Surgery



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