

Demographic Predictors and Outcomes of Cosmetic Makeovers: Insights into Life Satisfaction and Physical Appearance Comparison

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ABSTRACT

This study investigates the demographic predictors and psychological outcomes associated with cosmetic makeovers. Using a sample of 442 participants from Seoul, the research examines the impact of age, socioeconomic status, education, and cosmetic procedure experience on life satisfaction and physical appearance comparison. The results show that age and cosmetic procedure experience are significant predictors of life satisfaction, with older people reporting lower satisfaction and those who underwent cosmetic procedures reporting higher satisfaction. Socioeconomic status was the only significant predictor of physical appearance comparison, with individuals from higher SES more likely to compare their appearance to others. The results signify the complex interplay of demographic factors in shaping psychological outcomes related to cosmetic makeovers, suggesting the need for a deeper understanding of people's motives and satisfaction related to these interventions.

Introduction

The increasing use of social media and the proliferation of consumerism has fueled people's interest in their physical appearances partly because social media serves as convenient outlets for people to manifest their charms. This trend has given rise to various cosmetic makeovers, which encompass both surgical and non-surgical procedures, especially among younger individuals who are exposed to social media content where sometimes edited and idealized appearances are displayed. The popularity of social media has facilitated the establishment of beauty standards and aggravated the pressures for active social media users to keep abreast of beauty trends. This pressure has prompted many to seek cosmetic interventions to enhance their self-esteem and social acceptance. Despite this growing demand for cosmetic procedures and products, comprehensive research examining the underlying factors that influence people's desire for such interventions falls short of the demand.

Existing research has shown mixed results regarding the psychological impacts of cosmetic makeovers. While some studies highlight improvements in self-esteem and life satisfaction following cosmetic interventions, others show risks, including discontentment with the results or the possibility of dependency on further procedures, similar to addiction. Though the motives for cosmetic interventions vastly differ from one individual to another, demographic variables like age, socioeconomic status, or educational background can provide useful insights into the mechanisms that shape psychological outcomes. These variables interact in complex ways, impacting individuals' motives for seeking cosmetic enhancement and the extent to which these procedures produce desired outcomes.

This research bridges this gap by examining the demographic predictors of psychological outcomes related to cosmetic makeovers. The research seeks to identify how these factors influence life satisfaction and the desire for cosmetic interventions. By doing so, the result will contribute to a deeper understanding of the demographic and psychological dynamics in relation to cosmetic interventions, thereby offering insight that could inform both clinical practices and societal perspectives on beauty and well-being.

Literature Review

Cosmetic makeovers, which encompass both surgical and non-surgical procedures, have gained popularity as young people are more exposed to social media where they can easily and continuously access how other people present themselves. To meet the growing demand for cosmetics, various products and services have been poured into the market. However, there is little evidence to examine these trends, particularly regarding the demographic factors linked to the desire to enhance physical outlooks. In this research, we will examine what demographic factors influence psychological outcomes.

Life Satisfaction and Cosmetic Makeovers

Whether through surgical procedures or non-surgical treatments, cosmetic makeovers are meant to improve physical appearances. Individuals often resort to cosmetic makeovers to improve their self-esteem and personal satisfaction. However, it is often observed that one cosmetic procedure leads to another, creating a cycle of repeated procedures. This phenomenon raises the question: Does cosmetic procedure contribute to ongoing dissatisfaction with physical appearance? The psychological outcomes of cosmetic interventions are somewhat mixed. Walden, Thompson, and Wells (1997) have stated that the ultimate goal of cosmetic procedures is the improvement of self-image and psychological well-being. Other researchers described cosmetic procedures as “psychological intervention.” (Pertschuk, 1991) Goin and Rees (1991) report that cosmetic procedures induce psychological improvements, noting that cosmetic procedure significantly reduces shyness, anxiety, self-consciousness, and interpersonal sensitivity while improving self-esteem. More recent studies, including meta-analysis, have found that cosmetic procedure improves self-esteem, sociocultural attitude, and body satisfaction (Yoon & Kim, 2020). Nonetheless, the psychological outcomes of cosmetic interventions are not always positive. Herruer and colleagues (2015) conducted a meta-analysis on unsatisfactory psychological outcomes of cosmetic procedures, identifying factors such as youth, male gender, unrealistic expectations, previous cosmetic procedures, motivation based on relationship issues, and history of depression or personality disorder as predictors of dissatisfaction. These findings indicate the role of demographic predictors in determining the psychological outcomes of cosmetic procedures.

Physical Appearance Comparison

The tendency to compare one’s physical appearance with other people is important when examining the impact of cosmetic makeovers. According to social comparison theory, the drive for self-evaluation by comparing oneself with other people fosters competitive behavior (Festinger, 1954). Many people feel pressure to live up to social expectations and norms, which is often a desirable outcome. The downside of social comparison is that it encourages competitive behaviors. As people cater to socially desirable standards, they often lose track of who they are and what they truly want for themselves. Over time, this can take a toll on their psychological well-being. These days, the increasing popularity of social media and the feedback from their social media followers serve as a new form of reward. Fardouly and colleagues (2015) conducted an empirical study and found that participants who spent more time on Facebook reported a more negative mood. They also noted that those who are more likely to compare their appearance with others on social media reported more discrepancies than those in the control group. Another study by Fardouly and Vartanian (2015) adds to this finding; They found that young women who spend more time on social media feel more insecure about their physical appearance by comparing themselves with others. Because we are living in a hyperconnected society where we can peek into other people’s lives through an abundance of social media content, physical appearance comparison deteriorates young people’s mental well-being.

Demographic Predictors of Psychological Outcomes

Numerous studies have suggested that life satisfaction diminishes with age. In this regard, those who constantly compare their physical appearance with others might grow dissatisfied with their life. Steptoe, Deaton, and Stone (2014) argued that psychological well-being can be categorized into evaluative well-being (life satisfaction), hedonic well-being (feelings of happiness), and eudaemonic well-being (sense of purpose). They argue that older people are more likely to suffer from diseases that contribute to depression and impair hedonic and eudaemonic well-being. Other than age, socioeconomic status has been known to be associated with various psychological outcomes, including life satisfaction and social comparison. Researchers found that socioeconomic status (SES) and age are interrelated as young people are more likely to be influenced by their SES as they often measure their subjective well-being based on the resources they have (Huang, Liu, Wang, & Zhang, 2016). This finding suggests that young people who have comparatively fewer resources than older people are more likely to compare themselves with others, thus undergoing reduced happiness and satisfaction with their lives. Dittmar (2005) adds to this finding by highlighting that people who perceive that they lack social resources are more vulnerable to sociocultural pressures. They also noted that this pressure is linked to body dissatisfaction. Lastly, common demographic indicators such as education are known to increase life satisfaction but their connection with bodily satisfaction has not been studied enough. Michalos (2008) argued that higher educational attainment is typically associated with greater life satisfaction. Other researchers have found that a higher education level is a predictor for some cosmetic procedures like Botox injection or nevus removal (Li, et al., 2016). We can infer the reason for people undergoing these cosmetic procedures is their frequency of encounters with people who are highly conscious of their health and bodily aesthetics. Unfortunately, their motives are not sufficiently investigated through empirical studies.

Research Questions

1. What are the predictors of life satisfaction among individuals who have undergone cosmetic procedures?
2. How does the tendency to compare physical appearance relate to demographic factors including age, SES, and cosmetic procedure experience?
3. Does undergoing cosmetic makeovers significantly impact psychological outcomes like life satisfaction and physical appearance comparison?
4. How do age and socioeconomic status interact in predicting life satisfaction and physical appearance comparison among individuals who undergo cosmetic procedures?

Methods

A survey questionnaire was distributed to a metropolitan Seoul area populated with cosmetic surgery clinics. This location was chosen because it was assumed that the traffic of customers conscious of their appearance would be higher than in other regions. Participants were incentivized for their responses, and their participation was voluntary.

Table 1. Descriptive Statistics

Variable	N	Mean	SD	Min	Max
Age	442	.85	6.55	18	45
Birther	442	.66	.66	0	4
SES	442	.51	1.50	1	10
Employed	442	.44	.44	0	1
Education	442	.99	.99	2	5
Cosmetic Procedure	442	.50	.50	0	1

PHQ	442	.15	.65	1	4
Eating Disorder	442	.5	.88	1	5

Table 1 presents the descriptive statistics for the variables included in the analysis. A total of 442 people participated in the study, with a mean age of 28.85 years ($SD = 6.55$), ranging from 18 to 45 years. The average number of births reported was 0.30 ($SD = 0.66$), with over two-thirds of the participants having no children. Socioeconomic status scores ranged from 1 to 10, with a mean of 5.61 ($SD = 1.50$). Approximately 73% of the participants were employed ($M = 0.73$, $SD = 0.44$), and the average education level was 3.20 ($SD = 0.99$), indicating that most of them completed secondary school or higher. Also, 57% of the participants reported having undergone cosmetic procedures ($M = 0.57$, $SD = 0.50$). The mean PHQ scores, which measures their level of life satisfaction, was 2.25 ($SD = 0.65$) on a 4-point scale, indicating moderate levels. Finally, the PACS scores, which assessed participants' tendencies to compare their physical appearance with others, had a mean of 3.15 ($SD = 0.88$) on a 5-point scale, reflecting moderate levels of appearance comparison.

Results

Table 2. Cronbach's Alpha for Dependent Variables

Variables	Sample Question Items	Cronbach's alpha
Patient Health Questionnaire	I find my life interesting. I feel a sense of satisfaction. I believe I have the ability to contribute to society. I feel a sense of belonging to my community. I believe our society is becoming a better place to live. I think people are inherently good. I understand how our society functions. I am satisfied with my personality.	.87
Physical Appearance Comparison	I often compare my appearance to others'. The best way to determine who is overweight is to compare their body shapes with others. I compare the clothes I wear to what others are wearing. I compare my body shape to others' when I meet people. I become self-conscious when I am around someone with slim and toned arms.	.85

Table 2 displays the sample items measured for Patient Health Questionnaire and Physical Appearance Comparison scales. Cronbach's alpha was calculated to assess the internal consistency of each. According to Field (2013), a value of 0.7 or higher is considered acceptable and 0.8 is recommended for psychometric assessments. Both constructs achieved alpha coefficients of 0.8 or above, demonstrating strong internal consistency. Therefore, the items were combined into a single variable.

Table 3. Pair-wise Correlation

	Age	Birthed	SES	Employed	Education	C. Procedure	PHQ
Birthed	.62***						
SES	.11*	.14**					
Employed	.10*	-.10*	.07				
education	.31***	.12**	.24***	.16***			
C. Procedure	.00	.01	.08	.05	.03		
PHQ	.03	.09	.15**	.02	.12*	.05	
PACS	-.09*	-.05	-.05	.01	.02	.11*	-.11*

$p < .05$ *, $p < .01$ **, $p < .001$ ***

Table 3 presents the pairwise correlation examining the relationships among the variables. The pairwise correlation was conducted to examine the relationships among the variables. There was a strong positive correlation between age and the number of childbirths ($r = .62, p < .001$), suggesting that older patients tended to have more children. Age was positively correlated with SES ($r = .11, p < .05$), employment status ($r = .10, p < .05$), and education level ($r = .31, p < .001$). Additionally, education level was positively correlated with SES ($r = .24, p < .001$), employment status ($r = .16, p < .001$), and the number of childbirths ($r = .12, p < .01$).

When it comes to participants' perceived life satisfaction, which was measured with PHQ, SES was positively correlated with PHQ scores ($r = .15, p < .01$), and education level showed a significant positive correlation with PHQ scores ($r = .12, p < .05$). However, the experience of cosmetic procedure was not significantly correlated with most other variables except for PACS scores ($r = .11, p < .05$), which represents the tendency to compare physical appearance with others. PACS scores were negatively correlated with age ($r = -.09, p < .05$) and PHQ scores ($r = -.11, p < .05$), suggesting that younger participants and those with lower PHQ scores were more likely to compare their physical appearance with others.

Table 4. Multivariate Analysis of Variance (MANOVA)

Predictor Variable	Wilk's Λ	F (df1, df2)	p-value	Pillai's Trace	Hotelling's Trace	Roy's Largest Root
Overall	.73	1.48 (90, 790)	.004	.29	.34	.19
Age	.86	1.15 (54, 790)	.217	.15	.16	.10
Birthed	.97	1.21 (8, 790)	.293	.02	.02	.02
SES	.91	2.07 (18, 790)	.006	.09	.10	.06
Employed	.99	.29 (2, 395)	.75	.00	.00	.00

Education	.97	2.31 (6, 790)	.033	.03	.04	.03
C. Proced.	.98	3.05 (2, 395)	.048	.02	.02	.02

Table 4 presents the results of the Multivariate Analysis of Variance (MANOVA). There are significant multivariate effect of the predictor variables on the dependent variables (PHQ and PACS), Wilks' $\Lambda = .73$, $F(90, 790) = 1.48$, $p = .004$. This suggests that the combination of age, the number of childbirths, socioeconomic status, employment status, education level, and the experience of cosmetic procedure significantly influenced people's perceived life satisfaction and their tendency to compare physical appearance with others. Among the predictor variables, socioeconomic status (Wilks' $\Lambda = .91$, $F(18, 790) = 2.07$, $p = .006$), education level (Wilks' $\Lambda = .97$, $F(6, 790) = 2.31$, $p = .03$), and the experience of cosmetic procedure (Wilks' $\Lambda = .98$, $F(2, 395) = 3.05$, $p = .048$) showed significant multivariate effects on the dependent variables. On the other hand, age, number of childbirths, and employment status did not have significant multivariate effects. These findings indicate that SES, education, and cosmetic procedure can influence psychological outcomes measured by PHQ and PACS.

Table 5. Regression Model Predicting Life Satisfaction

<i>PACS</i>	Unstandardized Coefficient		<i>Standardized</i>	<i>t</i>	<i>p</i> -value
	<i>B</i>	Standard Error			
Const.	3.53	.27		12.99	.000
Age	-.02	.01	-.13	-2.08	.038
Birtherd	.05	.08	.04	.58	.563
SES	-.04	.03	-.06	-1.29	.196
Employed	.82	.10	.01	.21	.837
Education	.06	.05	.07	1.42	.158
C. Procedure	.19	.08	.11	2.26	.024

A multiple regression model was fitted to examine the predictors of life satisfaction with age, number of childbirths, socioeconomic status, employment status, education levels, and cosmetic procedure experience as independent variables. Table 5 presents the results of the regression analysis. The analysis revealed that age and cosmetic procedure were significant predictors of life satisfaction. Age had a negative impact on life satisfaction ($\beta = -.02$, $p = .038$), indicating that older individuals reported slightly lower levels of life satisfaction. Conversely, undergoing cosmetic procedure had a positive impact on life satisfaction ($\beta = .19$, $p = .024$), suggesting that individuals who had cosmetic procedure experienced higher life satisfaction.

Table 6. Normality Assumption Check

Variable	Observation	Skewness	Kurtosis	Adj. Chi2	Prob.>Chi2
Residuals	442	.16	.97	1.96	.38

To assess the normality assumption of the regression model, we examined the skewness and kurtosis of the residuals. The skewness value of 0.16 suggests minimal asymmetry, while the kurtosis value of 0.97 indicates that the distribution is close to normal. Also, the adjusted Chi-square value of (1.96) and the corresponding p-value (0.38) confirm that the normality assumption is met. These results indicate that the residuals are normally distributed, thus validating the regression model.

Table 7. Regression Model Predicting Physical Appearance Comparison

<i>PACS</i>	Unstandardized Coefficient		<i>Standardized</i>	<i>t</i>	<i>p</i> -value
	<i>B</i>	Standard Error			
Const.	1.93	.20		9.58	.000
Age	-.01	.01	-.09	-1.37	.171
Birtherd	.12	.06	.12	1.95	.052
SES	.05	.02	.12	2.47	.014
Employed	.03	.07	.02	.40	.688
Education	.06	.03	.09	1.84	.067
C. Procedures	.04	.06	.03	.71	.481

A multiple regression model was fitted to examine the predictors of physical appearance comparison. The model revealed that socioeconomic status was the only significant positive predictor ($\beta = .05$, $p = .014$), indicating that individuals with higher SES are more likely to compare their physical appearance with others.

Table 8. Normality Assumption Check

Variable	Observation	Skewness	Kurtosis	Adj. Chi2	Prob.>Chi2
Residuals	442	.00	.17	19.30	.0001

The normality assumption for the residuals of this model was evaluated. The skewness of the residuals was .00, indicating perfect symmetry in the distribution. The kurtosis was 0.17, which suggests that the distribution is much flatter than a normal distribution, with less extreme values in the tails. The adjusted chi-square test result ($X = 19.30$, $p = .0001$) indicates a significant deviation from normality.

Table 9. Variance Inflation Factor Values for Independent Variables across Two Models

	<i>VIF</i>	<i>1/VIF</i>
Age	1.86	.54
Birtherd	1.74	.57
Education	1.2	.83
SES	1.09	.92

Employed	1.08	.93
C. Procedure	1.01	.99
<i>Mean VIF</i>	<i>1.33</i>	

To assess the presence of multicollinearity among the independent variables, we examined the Variance Inflation Factor (VIF) values across all regression models. The VIF values were identical for each model, with age having the highest VIF of 1.86 and the cosmetic procedure experience the lowest at 1.01. The mean VIF was 1.33, indicating that multicollinearity is not a concern because all VIF values are well below the commonly accepted threshold of 10.

The analyses indicate that independent variables do not exhibit problematic multicollinearity, as evidenced by the VIF values across both regression models. Together with the findings from the MANOVA and the subsequent univariate regressions, the results point to the impact of such demographic factors and their explanatory powers.

In summary, the MANOVA results demonstrate significant multivariate effects, which were further examined through univariate regression analyses. The VIF values across all models confirm that multicollinearity does not compromise these findings. The results underscore the influence of cosmetic makeovers on people's perceived life satisfaction.

Discussion & Conclusion

The results of our univariate analysis revealed that age and cosmetic procedures were significant predictors of life satisfaction. Older people reported slightly lower life satisfaction, which aligns with previous research findings (Step-toe, Deaton, & Stone, 2014). Conversely, people who had undergone cosmetic procedures reported higher life satisfaction. This finding supports the view that cosmetic makeovers can improve people's self-esteem and overall satisfaction (Walden, Thompson, & Wells, 1997; Goin & Rees, 1991). While cosmetic procedures positively impacted life satisfaction, other studies have shown mixed results, indicating that the psychological benefits of cosmetic procedures can vary depending on factors like their own expectations, mental health, and motivation for the procedures (Herruer et al., 2015). In another univariate regression analysis, the effects of SES, employment status, and education levels were not significant predictors of life satisfaction. This is partly because sociocultural factors were not accounted for.

When it comes to physical appearance comparison, SES was the only significant predictor. Those with higher SES were more likely to compare their appearance with others, possibly reflecting the pressure of maintaining socially desirable images within higher social strata (Huang et al., 2016). While cosmetic procedures positively predicted life satisfaction, it did not significantly predict physical appearance comparison. This may suggest that those who undergo cosmetic makeovers feel satisfied with their appearance and therefore feel less urge to compare themselves to others.

The results of the multivariate analysis signified the importance of demographic factors in explaining psychological outcomes related to cosmetic makeovers. The MANOVA results revealed the significant multivariate effects of SES, education, and cosmetic procedure experience on the combined dependent variables of life satisfaction and appearance comparison. The findings suggest that people with different SES, educational backgrounds, and cosmetic procedure experience have distinct psychological outcomes.

This research unveiled important insights into the psychological implications of cosmetic makeovers, particularly for life satisfaction and appearance comparison. The impact of age, SES, and cosmetic procedure experience shape those outcomes. Although cosmetic procedure was correlated with appearance comparison, its impact was inconsequential. Thus, the motives and the interplay of demographic factors for cosmetic makeovers are complex and multifaceted. Future studies could explore other psychological outcomes of cosmetic makeovers, such as cultural differences, social support, and long-term satisfaction.

While cosmetic makeovers can enhance life satisfaction for some people, the relationship between these procedures and psychological outcomes is not straightforward. Further investigation is needed to fully understand various factors that shape people's improved satisfaction associated with cosmetic intervention.

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