



Research Article

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Prediction of various Cosmetic surgeries according to ego strength, object relations and defensive mechanism

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ABSTRACT

The present research aimed to predict various Cosmetic surgeries according to object relations, ego strength and defensive mechanisms. This was a descriptive research which was done by correlation method and its statistical population included all the women who were applicants of Cosmetic surgery going to Tehran's beauty clinics in 2015 from which 100 number were selected as sample by available sampling method. Data collection instruments included Bell object relations and reality testing inventory questionnaire (BORRI), psychological inventory ego strength questionnaire (PIES) and defensive mechanisms questionnaire (DSQ). Duplex correlation coefficient and logistic regression were analyzed by software SPSS. The results showed that there is a significant relationship between ego strength, object relations and raw defensive styles and various Cosmetic surgeries ($p < 0.05$). Among sub-scales of object relations, just alienation with equality scale of 1.22, ego strength with equality scale of 0.977 and defensive mechanisms with equality scale of 1.012 have been able to anticipate various Cosmetic surgeries. According to obtained results in this research, objects relations, ego strength and defensive mechanisms cannot predict various Cosmetic surgeries in a combined model.

Key words: *Cosmetic surgery, Object Relations, Ego Strength, Defensive Mechanism*

INTRODUCTION

Cosmetic surgery is one of the most common surgical operations in the world and the number of its applicants is increasing; as the number of people who performed a Cosmetic surgery in 2000 in America has been equal to 1.3 million which shows about 198 percent increase compared with 1992 [1]. Theories of object relation focus on the fact that human's main motivational drive is communication with other. People essentially seek to communicate with the subject, rather than seeking pleasure and their ultimate goal is communication with others [2]. According to Starfish's definition [3], ego strength is ego ability to deal with external reality when ego creates interaction between you, super Ego and external environment. The studies have shown that attachment styles and primary object relations influence formation and capabilities growth related to defensive mechanism from childhood and secondly, disorder in defensive mechanisms may lead to defect and insufficiency in identifying and expressing emotions [4]. The boom in the demand for Cosmetic surgery has encouraged many doctors to develop their expertise for performing cosmetic methods. Now, Cosmetic surgery exists everywhere regarding culture. There are interminable topics regarding Cosmetic surgeries in TV, journals and websites [5]. Dr. Gregory Borah, on behalf of American community of Cosmetic surgeries expresses

that the Cosmetic surgery's goal is improvement of person's psychological function through correcting image of his body. According to the definition, Cosmetic surgery is performed for the purpose of creating a tangible change in body. A patient goes to the doctor as a result of a psychological tendency, rather than because of disease or social damage. Patient is more autonomous in decision-making process compared with disease-related treatment plans. All fees paid in advance. Insurance rarely covers Cosmetic surgery. This surgery is totally selective and it is optional for some people and it has some features such as these [6]. Object relation means inter-personal relationships. The term object which is a special word and it is invented by Freud refers to everything that meets a need. In a broader sense, object refers to an important person or thing which is subject or goal of a person's feeling and drives. In combination with relations, this word refers to interpersonal relationship and it indicates inner remains of past relationship which shape person's current interaction with others. Psychoanalysis always seeks to know how people's past influence their current behavior and relationship. Communicative issues such as relationship between parent and children during oedipal period is one of the issues which has been traditionally studied [7]. Theorists of object relations study formation and primary classification of psychological structures (their internal ideas or the same subject) and the way of emerging these internal structures at inter-personal situations. These theorists focus on relationships of early stage of life and it leaves some effects and remains in person's period. These theories interpret pathology or mental illness as a kind of growth interruption rather than some structural conflicts. Object relations theory states that inner effects remained of past relationship form person's current interaction with others [7]. Suits et al [8] studied effects of Cosmetic surgery on body image, self-esteem and psychological problems in a research. This research aimed to study this point that does Cosmetic surgery influence body image, self-esteem and psychological problems? This research's results showed that evaluation of improved body image following performing Cosmetic surgery has been increased as the score of self-esteem, although this increase was slight compared with control group. Body image evaluation was increased while these patients were less satisfied with their appearance before performing surgery compared with control group. There were no significant difference between control and compared group regarding increase in self-esteem. Laverty et al [9] in their studies regarding the effect of ego strength on self-esteem increase concluded that there is positive correlation between ego strength and self-esteem increase. Mack and Fredrick [10] also observed that there is positive correlation between ego strength and increase in insight, clarity in thinking of patients and self-esteem. Higgins [11] found that there is relationship between low ego strength and depression signs such as sense of sin and absence of effective opinion on environment.

Due to the high statistics of applicants for various Cosmetic surgeries in recent years, evaluation of fundamental reasons especially childhood damages about which a little studies was done regarding applicants of various surgeries seems useful. Implementing such researches toward informing people about mental activator for performing surgery and replacing appropriate psychological treatments in order to receive desirable feeling are necessary.

Instruments and methods

Research's hypotheses

- 1- Object relations, ego strength and defensive mechanism have the ability to predict various Cosmetic surgeries.
- 2- There is positive correlation between object relations and various Cosmetic surgeries.
- 3- There is negative correlation between ego strength and various Cosmetic surgeries.
- 4- There is positive correlation between defensive mechanism and various Cosmetic surgeries.

Theoretical and operational definitions of variables

Cosmetic surgery: Cosmetic surgery is called to any kind of defensive operation in order to mak more beautiful which is basically done regardless of their expertise [6]. Cosmetic surgery in this research means any Cosmetic surgery including the face, neck and chest surgery which are done more than once.

Object relations: Object relations refer to inter-personal relationships and it indicates inner remains of past relations which form person's current interaction with others [7]. Object relations consist of the score which is obtained according to 45 items of Bell's object relations questionnaire.

Ego strength: Ego strength is certain quality which is started by man's activity during successful stages of his life in order to activate and revive and it is specified in different writings as "ego effect" and "vital strength" and it is placed in the main adaptability and social-mental health concepts of Erickson [12]. Ego strength in this research means the score which was obtained by participant in research from 32 items of ego strength questionnaire [12].

Defensive mechanisms: Defensive mechanism is a collection of operations which was performed by organism in order to protect itself against shocks and emotions (Compels in 1988). Defensive mechanism means the score obtained by participant according to 64 items of defensive mechanisms questionnaire.

Research methodology

This research is a descriptive study with correlation plan. Correlation research aims to study range and changes of one or more variables with range and changes of the other one or ones.

Statistical population or sample

Accessible sampling method was used in the present research in such a way that among applicants of Cosmetic surgery, 100 persons who have experienced Cosmetic surgery in the past and they also attended in next surgeries answered questionnaires in Tehran's Cosmetic surgery clinics. 100 women who were totally reluctant toward performing Cosmetic surgery were selected as compared group. Entrance criteria for this research was the minimum age of 20 and maximum of 38 years and having educational degree of diploma up to higher and applicant of more than one surgery whose last Cosmetic surgery was at the time of study. Those who were forced to perform Cosmetic surgeries because of burns or congenital anomalies, those who have a history of multiple visits to a psychiatrist, those with certain psychiatric disorders and also those who were reluctant to answer, were excluded from this study.

Data collection instrument

Bell's object relation questionnaire (BORI), psychological inventory of ego strength (PIES) and defensive mechanisms questionnaire (DSQ)

Data reliability and validity

Mechanisms correlation with characteristic features according to Neo 5- factor characteristic questionnaire (NEO-FFI) was studied in order to assess simultaneous validity. According to the findings related to validity, it was specified that questionnaire enjoys desirable validity as main copy [13]. Reliability of defensive mechanisms questionnaire has been also studied through re-tests method and computing Cronbach's alpha. Alpha reliability coefficient has been shown in study groups divided in students, university- students, gender of sampling group and also defensive mechanisms.

Data collection method

For conducting present research, 100 women seeking various Cosmetic surgeries (going to several Cosmetic surgery clinics which were able to cooperate and they were accessible) and 100 women who were reluctant toward performing these surgeries and they were member of applicants' family) were selected by simple available sampling method and all of them were in age range of 20 up to 38. Then, object relations, ego strength and defensive mechanism questionnaires were given to them and some explanation regarding method of answering was offered. Following collection, questionnaires were entered into software SPSS and required statistical analyses were performed on them according to the research's hypotheses.

Data analysis was performed at two levels including descriptive and inferential. Statistical indexes including frequency, frequency percentage, mean, median, variance, standard deviation, elongation and roughness were used in descriptive part. Statistical models including doubled-stranded correlation and logistic regression were used at inferential part consistent with the research's hypotheses.

Results

Data has been analyzed in this part. Data has been analyzed in this part at two levels including descriptive and inferential. Indexes including frequency mean, median, variance, standard deviation, etc. have been brought in descriptive part for examinees and double-stranded correlation and logistic regression have been used in inferential part consistent. The results were presented following data analysis as below.

Descriptive analysis

Object relations variable

Table 1- Central statistical indexes, distribution and relative distribution of object relations' components

variable	group	mean	median	Standard deviation	roughness	elongation	minimum	maximum
Alienation	First	9.36	9.00	2.92	-0.67	-0.504	3	16
	Second	7.75	7.00	2.62	0.653	0.92	3	15
Insecure attachment	First	7.31	7.00	2.89	0.29	-0.840	1	13
	Second	6.03	5.00	2.92	1.11	0.753	2	15
Self-centered	First	5.60	6.00	2.21	0.253	0.274	0	11
	Second	4.77	5.00	2.37	0.443	-0.626	1	11
Social insufficiency	First	2.63	3.00	1.37	0.07	-1.170	0	5
	Second	1.95	2.00	1.24	1.264	0.906	0	5

Ego strength and defensive mechanisms variables

Table 2- Central statistical indexes, distribution and relative distribution of object relations' components

variable	group	mean	median	Standard deviation	roughness	elongation	minimum	maximum
Ego strength	First	214.90	215	18.91	-0.213	-0.264	169	254
	second	223.311	223	20.59	-0.333	-0.604	176	262
Proficient defensive mechanisms	First	5.65	5.50	1.52	-0.032	-0.284	2	9
	second	5.74	5.62	1.30	0.039	-0.530	2.50	8.38
	First	5.01	4.83	1.05	0.340	1.127	2.33	8.04

Raw defensive styles	second	4.66	4.45	1.13	0.352	-0.456	2.21	7.29
Neurotic defensive style	First	5.33	5.37	1.27	0.229	-0.028	2.63	8.50
	second	5.32	5.25	1.31	0.322	-0.197	2.25	8.75

Inferential analysis

The first hypothesis:

There is positive correlation between object relations and various Cosmetic surgeries.

Double-stranded correlation was used in order to study correlation between components of object relations quality and Cosmetic surgeries whose results have been reported in Table 3. As it is observed at this table, there is positive significant correlation between object relations and various Cosmetic surgeries.

The second hypothesis: There is negative correlation between ego strength and various Cosmetic surgeries.

Double-stranded correlation was used in order to test correlation first hypothesis whose results have been reported in Table 4. As it is observed at this table, there is negative significant correlation between ego strength and various Cosmetic surgeries.

The third hypothesis: There is positive correlation between defensive mechanisms and various Cosmetic surgeries.

Double-stranded correlation was used in order to study the correlation between defensive mechanisms and Cosmetic surgeries whose results have been reported in Table 5. As it is observed at this table, there is positive significant correlation between raw defensive styles and various Cosmetic surgeries and there is no positive significant correlation between proficient and neurotic defensive mechanisms and various Cosmetic surgeries.

Table 3 up to 5: (3) Double-stranded correlation between components including object relations and Cosmetic surgery, (4) Double-stranded correlation between ego strength and Cosmetic surgery (5) Double-stranded correlation between defensive mechanisms and Cosmetic surgery

(3)

Variables	number	Correlation coefficient	Significance level
Alienation and Cosmetic surgery	192	0.243	0.000
Insecure attachment and Cosmetic surgery	192	0.185	0.3
Social insufficiency and Cosmetic surgery	192	0.211	0.001
Self-centered and Cosmetic surgery	192	0.165	0.001

(4)

Variables	number	Correlation coefficient	Significance level
Ego strength and Cosmetic surgery	2.00	-0.185	0.002

(5)

Variables	number	Correlation coefficient	Significance level
Proficient defensive style and Cosmetic surgery	194	-0.023	0.697
Raw defensive style and Cosmetic surgery	194	0.143	0.016
Neurotic defensive style and Cosmetic surgery	194	0.017	0.779

Research's assumptions

Logistic regression method was used to test all the research's assumptions whose results have been reported in Tables 6 up to 13.

The first assumption: Object relations, ego strength and defensive mechanisms have potency to predict various Cosmetic surgeries in women.

According to the fact that there is significant correlation between components including object relations, ego strength and raw defensive styles and various Cosmetic surgeries, they were entered into model as predictor variable. Components including object relations, ego strength and raw defensive styles were entered into regression analysis as prediction variable in regression model in which Cosmetic surgery was entered into analysis as a criterion variable (various Cosmetic surgeries with code 1 and without Cosmetic surgeries with code 0). Omnibus test showed that completed model is significantly reliable ($p < 0.007$, $K^2 = 17.570$, $DF = 6$). The results of Hosmer and Lemeshow tests show appropriateness of model ($p < 0.483$, $DF = 8$, $K^2 = 7.511$). This model predicts 10 up to 13.3 percent of changes in criteria (various surgeries) with overall classification accuracy equal to 62.9 percent (Table 6). The results of Table 7 show that none of variables in combined model are appropriate predictor for possibility of various surgeries in women.

Table 6 and 7- (6) accuracy of two group's classification and (7) the results of Wald statistic for variables entered in model

(6)

		prediction		
		Surgery condition		Correct percentage
		Various surgeries	Without surgery	
Surgery condition	Various surgeries	49	32	60.5
	Without surgery	30	56	65.1
Percentage of sum				62.9

(7)

Variable entered into model	Non-standard beta coefficient	Wald statistic	Degree of freedom	Significance level	Superiority proportion
alienation	0.208	3.249	1	0.071	1.231
Insecure attachment	-0.090	0.662	1	0.416	1.914
Self-centered	-0.008	0.007	1	0.935	0.992
Social insufficiency	0.078	0.133	1	0.715	1.081
Ego strength	-0.016	2.312	1	0.128	0.984
Raw defensive style	0.017	0.009	1	0.923	1.081
fixed	2.039	0.554	1	0.456	7.680

The second assumption: Object relations predict various Cosmetic surgeries in women.

According to the fact that there is significant correlation between component of object relations and various Cosmetic surgeries (Table 7), they were entered into model as predictor variables. Components of object relations were entered into regression analysis as predictor variables in regression model in which Cosmetic surgery was entered into analysis as criterion variable (various Cosmetic surgeries with code 1 and without Cosmetic surgeries with code 0). Omnibus test showed that completed model is significantly reliable ($p < 0.003$, $K^2 = 15.950$, $df = 4$). The results of Hosmer and Lemeshow tests show appropriateness of model ($p < 0.639$, $df = 8$, $K^2 = 6.078$). This model predicts 8.5 up to 11.4 percent of changes in criteria (various surgeries) with overall classification accuracy equal to 60 percent (Table 8). The results of Table 9 show that only Wald statistic coefficient of alienation component is significant. In fact, increase in any score to alienation component is accompanied with 1.221 decrease in possibility of various surgeries. According to the results, regression equation for amount of various surgeries possibility based on alienation component of object relations can be read as following:

$$\text{Possibility of various surgeries} = (-1.852) + (0.200) (\text{alienation})$$

Tables (8 and 9): (8) accuracy of two group classification and (9) the results of Wald statistic for variables entered into model

(8)

		prediction		
		Surgery condition		Correct percentage
		Various surgeries	Without surgery	
Surgery condition	Various surgeries	46	41	52.9
	Without surgery	30	62	67.4

Percentage of sum		60.3
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(9)

Variable entered into model	Non-standard beta coefficient	Wald statistic	Degree of freedom	Significance level	Superiority proportion
alienation	0.200	3.473	1	0.026	1.221
Insecure attachment	-0.081	0.635	1	0.426	0.922
Self-centered	0.051	0.368	1	0.544	1.053
Social insufficiency	0.158	0.716	1	0.398	1.171
fixed	-1.852	11.002	1	0.001	0.157

The third assumption: ego strength predicts various Cosmetic surgeries in women.

According to the fact that there is significant correlation between ego strength and various Cosmetic surgeries (Table 6), it was entered into model as predictor variable. Ego strength was entered into regression analysis as predictor variable in regression model in which Cosmetic surgery was entered into analysis as criteria variable (various Cosmetic surgeries with code 1 and without Cosmetic surgeries with code 0). Omnibus test showed that completed model is significantly reliable ($p < 0.002$, $K^2 = 9.256$, $DF = 1$). The results of Husmer and Lemosho tests show appropriateness of model ($p < 0.330$, $DF = 8$, $K^2 = 9.145$). This model predicts 4.7 up to 6.3 percent of changes in criteria (various surgeries) with overall classification accuracy equal to 60 percent (Table 10). The results of table 11 show that only Wald statistic coefficient of alienation component is significant. In fact, increase any score to alienation component is accompanied with 0.977 number of decrease in possibility of various surgeries. According to results, regression equation for amount of various surgeries possibility based on ego strength can be read as following:

Possibility of various surgeries = $(4.982) + (-0.023)$ (ego strength)

Tables (10 and 11): (10) accuracy of two group classification and (11) the results of Wald statistic for variables entered into model

(10)

		prediction		
		Surgery condition		Correct percentage
		Various surgeries	Without surgery	
Surgery condition	Various surgeries	57	38	60.0
	Without surgery	38	58	60.4
Percentage of sum				60.2

(11)

Variable entered into model	Non-standard beta coefficient	Wald statistic	Degree of freedom	Significance level	Superiority proportion
Ego strength	-0.023	8.708	1	0.003	0.977
fixed	4.982	11.002	1	0.003	145.719

The fourth assumption: defensive mechanisms predict various Cosmetic surgeries in women.

Logistic regression was used in order to assess this assumption. According to the fact that only raw defensive styles had significant correlation with various Cosmetic surgeries (Table 8), it was entered into model as predictor variable. Raw defensive styles were entered into regression analysis as predictor variable in regression model in which Cosmetic surgery was entered into analysis as criteria variable (various Cosmetic surgeries with code 1 and without Cosmetic surgeries with code 0). Omnibus test showed that completed model is significantly reliable ($p < 0.027$, $K^2 = 4.912$, $DF = 1$). The results of Hosmer and Lemeshow tests show appropriateness of model ($p < 0.011$, $DF = 8$, $K^2 = 19.844$). This model predicts 2.5 up to 3.3 percent of changes in criteria (various surgeries) with overall classification accuracy equal to 53.1 percent (Table 12). The results of Table (13) show that only Wald statistic coefficient of raw defensive styles is significant. In fact, increase in any score to raw defensive styles is accompanied 1.012 number of increase in possibility of various surgeries. According to results, regression equation for amount of various surgeries possibility based on alienation can be read as following:

Possibility of various surgeries = $(-1.418) + (0.293)$ (raw defensive styles)

Tables (12 and 13): (12) accuracy of two group classification and (13) the results of Wald statistic for variables entered into model

(12)

		prediction		
		Surgery condition		Correct percentage
		Various surgeries	Without surgery	
Surgery condition	Various surgeries	47	50	48.5
	Without surgery	41	56	57.7
Percentage of sum				53.1

(13)

Variable entered into model	Non-standard beta coefficient	Wald statistic	Degree of freedom	Significance level	Superiority proportion
Raw defensive styles	0.293	4.745	1	0.029	1.341
fixed	-1.418	4.529	1	0.033	0.242

In justification of Andres's results, Sing and Bund [14] know undeveloped defensive mechanisms as 12 mechanisms which can refer to act-receptive, physical-making and valueless-making. This means that applicants of various Cosmetic surgeries make anxiety due to their inner conflict physical and they make themselves and their appearance status valueless and in other words, these people have negative attitude toward their body.

Discussion and conclusion

The results of present research showed that there is significant relationship between ego strength and performing various Cosmetic surgeries, so that however ego strength is less, possibility of performing Cosmetic surgery will be increased. In the other word, ego strength is a useful predictor for performing these surgeries. Starfish's definition is referred in justification of this result in which ego strength is ego ability to encounter external reality. In addition, ego strength is defined as ego ability to establish balance between nature and superego's demands. In the other words, ego strength keeps mind's activators mechanism active step by step through reducing mental inner conflicts. So that it can be said that these people are dissatisfied with their body image and as psychoanalytic theories declare, there is negative relationship between hysterical disorders and ego strength so that Shajarat in 2014 in his research showed that self-criticism (monitoring, shame and attention), hidden narcissism and anxiety attachment style are important markers in recognizing the reason of performing Cosmetic surgery. Another research entitled "body deformity disorder and Cosmetic surgery" by Kerry Rand et al in 2006 studied relationship between body deformity disorder and Cosmetic surgery and research's results showed that body deformity disorder is a common psychiatric disorder among those who seek Cosmetic surgery.

The other research's result is that there is also significant relationship between sub scales alienation of object relations and performing Cosmetic surgery. In other word, however alienation is more, the possibility of performing Cosmetic surgery will be increased. In justifying obtained result, we can refer to this issue that remaining internal effects of past communications form person's current interactions. Therefore, people have interaction with their real own, they also communicate with the people who they internalize (mental representation which may be a falsification of real one) and from opinion of Forborn, this issue leads to change in way of self-perception and self-experience [7]. So that people are suffered from a downgrade and alienation and they project this downgrading to his physical appearance. Research's results also showed that application of raw defensive styles increases the possibility of performing Cosmetic surgery. In justification of Andres's results, Sing and Bond [14] know raw defensive styles as 12 mechanisms which can refer to act-receptive, physical-making and valueless-making. This means that applicants of various Cosmetic surgeries make anxiety due to their inner conflict physical and they make themselves and their appearance status valueless and in other words, these people have negative attitude toward their body.

The most important restrictions of this study are: This research's population includes applicants of various surgeries in Tehran which cannot extend to entire country. Most of the doctors and applicants of Cosmetic surgery were not willing to cooperate and so research process was decelerated. Cosmetic surgeries applicants with three or more Cosmetic surgeries in past did not cooperate.

Resources

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