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## A Comparison of Personality Characteristics, Self-Esteem, and Body Image in Rhinoplasty Applicants versus Non-Applicants.

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**ABSTRACT**

Rhinoplasty is mostly done following application for beauty. It is a type of surgery increasing in Iran. Some studies have showed that applicants' psychological characteristics are different from normal people's ones. This study compares personality characteristics, self-esteem, and body image in rhinoplasty applicants and non-applicants. It was a comparative (test-control) and sectional research. The statistical sample of the study comprised 124 people including 62 applicants and 62 non-applicants. They were selected among those met entrance criteria by non-random convenience sampling. In this study, personality characteristics were measured using the short form of NEO Personality Inventory. Body image was assessed using Body Image Concern Inventory (BICI). To measure self-esteem, Coopersmith Self-Esteem Inventory (CSEI) was applied. Based on results, rhinoplasty applicants had higher mean scores in all personality characteristics (except extroversion). Again, regarding applicants' (versus non-applicants) self-esteem, results indicate that applicants have higher self-esteem. Similarly, based on t=3.0604 and P-value=0.001, there is a significant difference between rhinoplasty applicants and non-applicants' body image. As a result, rhinoplasty applicants generally have different personality characteristics, higher self-esteem, and more appropriate body image as compared to non-applicants.

**Keywords:** Personality; Self Concept; Body Image; Rhinoplasty

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## INTRODUCTION

Rhinoplasty refers to a type of plastic surgery done aiming to get the nose beautiful or remove its limitations and narrowness. Bombarding the society through various media led to increasing number of applicants ready for this kind of surgery [1]. Today, rhinoplasty is mostly done following cosmetic application [2]. It has been accepted by society and led to a series of special condition for people [1]. Although there is no official statistics regarding rhinoplasty in Iran, it is said that rhinoplasty has been increased about %80 in Iran. Iran and Brazil have maximum rate of rhinoplasty in the world [3]. In Iran, due to women's Islamic veil where only a part of face is seen, the cosmetic surgery of face has been most welcomed by the Iranian society during the recent years to add to their beauty [4]. In the recent years, various studies on some psychological disorders among cosmetic surgery applicants have been also increased. Researchers have found out that mental disorders and problems can be considered. That is, in some of these studies, body image disorder is to some extent prevalent and more among applicants as compared to normal individuals and non-applicants. Finally, the dissatisfaction with body image has encouraged patients to refer for cosmetic surgeries including rhinoplasty [5]. Wright was the first to emphasize this issue that there are special personality characteristics and/or qualities among rhinoplasty applicants by carrying out a study. Next studies further pointed the issue that personaly disorders in rhinoplasty applicants were higher as compared to non-applicants. They approved Wright's idea [4]. The examination of various personality aspects in plastic surgery applicants showed that confidence is different in these individuals as compared to other people in this society. It is seen that some individuals undergone cosmetic surgery have higher confidence as compared to their confidence before surgery [6] Level of anxiety is higher among cosmetic surgeries (including rhinoplasty) applicants as compared to other social groups [7-9].

Based on the abovementioned, this study aims to compare personality characteristics, self-esteem, and body image in rhinoplasty applicants to non-applicants (normal people) in Bandarabbas. The, it will be possible to reduce social and economic problems and costs using the results of this study.

## METHOD

It was a comparative (test-control) and sectional research. This study was carried out in Bandarabbas, in 2013. Target population consisted of all cosmetic surgery applicants and non-applicants in Bandarabbas. Accordingly, the statistical sample of the study comprised 124 people including 62 applicants and 62 non-applicants. They were selected among those met entrance criteria by non-random convenience sampling. Test group (applicants) were those individuals referred to cosmetic surgery clinics of Bandarabbas with consent and cooperation, the definiteness of the time of cosmetic surgery by rhinoplasty specialist during the next 15 days after passing through medical stages, not having medical and necessary reasons for undergoing cosmetic surgery, and the conduction of cosmetic surgery in operation room rather on out-patient and injection in office. Control group (non-applicant participants and individuals) was selected from the applicants' families and relatives based on age, gender, job, and education. In the next stage, selected cosmetic surgery applicants and non-applicants filled out the questionnaires of the study. In this study, personality characteristics were measured using the short form of NEO Personality Inventory. Body image was assessed using Body Image Concern Inventory (BICI). To measure self-esteem, Coopersmith *Self-Esteem Inventory* (CSEI) was applied. Here, it was explained for all participants that individuals' psychological characteristics would be examined. Results would be kept completely confidential and merely used for accomplishing research objectives. Those who were willing and had consent to participate the study entered this research and those who did not respond researcher's questions appropriately and did not properly cooperated were omitted. The collected data was analyzed by SPSS16 using descriptive statistics methods. Kolmogorov–Smirnov test (to compute data normality), MANCOVA, and independent t-test were applied. In this study, Kolmogorov–Smirnov test was used. Level of significance of z values for dependent variables in total sample was >0.05. As a result, the normality of dependent variables was approved.

## RESULTS

Studying personality characteristics in the society under study showed that means neuroticisms was 34.76, mean extroversion 40.02, mean flexibility 38.34, mean agreeability 37.88, and mean conscientiousness 39.88. Based on results, maximum mean was related to extroversion and minimum mean to neuroticism.

Results of the personality characteristics of the sample under study in terms of rhinoplasty applicants and non-applicants (normal people) show that mean neuroticism scores was 35.4 and 34.12 for applicants and non-applicants, respectively. Mean extroversion scores was 39.2 and 40.84 for applicants and non-applicants, respectively. Mean flexibility scores was 38.6 and 38.08 for applicants and non-applicants, respectively. Mean agreeability scores was 39.28 and 36.48 for applicants and non-applicants, respectively. Mean conscientiousness scores was 39.92 and 39.84 for applicants and non-applicants, respectively. Based on results, all personality characteristics (except applicants' extroversion) have higher mean scores in applicants.

Concerning self-esteem of the sample, results showed that mean general self-esteem scores was 25.38, mean social self-esteem 26.36, and mean familial self-esteem 12.28. Results of self-esteem indicate that general self-esteem has maximum mean scores. Yet, familial self-esteem has minimum mean scores.

Results of the self-esteem of the sample under study in terms of rhinoplasty applicants and non-applicants (normal people) show that mean general self-esteem scores was 95.92 and 24.84 for applicants and non-applicants, respectively. Mean social self-esteem scores was 27.12 and 25.6 for applicants and non-applicants, respectively. Mean familial self-esteem scores was 12.44 and 12.12 for applicants and non-applicants, respectively.

Results of the body image of the sample under study showed that mean body image scores was in sum 45.4. Mean body image scores was 52.92 and 37.88 for rhinoplasty applicants and non-applicants, respectively.

Results showed that there is a significant difference between two groups at least in one of the dependent variables. To further examine this difference, one-way ANOVA was carried out in the context of MANCOVA. Results are presented in the forthcoming parts. Following table lists one-way ANOVA results in MANCOVA context for comparing the scores of variables between two different groups.

**Table 1: One-way ANOVA in MANCOVA context on dependent variables scores**

| conflicts | sum squares | FD | mean squares | F | p |
|---|---|---|---|---|---|
| neuroticism | 89510.413 | 1 | 89510.413 | 2579.116 | 0.001 |
| extroversion | 121766.453 | 1 | 121766.453 | 2796.544 | 0.001 |
| flexibility | 109748.813 | 1 | 109748.813 | 3239.209 | 0.001 |
| agreeability | 104981.813 | 1 | 104981.813 | 2886.403 | 0.001 |
| conscientiousness | 119201.333 | 1 | 119201.333 | 3132.391 | 0.001 |

Results of the above table indicate that there is a significant difference between rhinoplasty applicants and non-applicants' (normal people) personality characteristics based on P-value=0.001 in each aspect. That is the confidence of the effect of cosmetic surgery application on each component of personality characteristics (neuroticism, extroversion, flexibility, agreeability, and conscientiousness) is %99.

Results showed that there is a significant difference between two groups at least in one of the dependent variables. To further examine this difference, one-way ANOVA was carried out in the context of MANCOVA. Results are presented in the forthcoming parts. Following table lists one-way ANOVA results in MANCOVA context for comparing the scores of variables between two groups of rhinoplasty applicants and non-applicants (normal people).

Results indicate that there is a significant difference between rhinoplasty applicants and non-applicants' (normal people) self-esteem based on P-value=0.001 in each aspect. That is the confidence of the effect of cosmetic surgery application on each component of self-esteem (general self-esteem, social self-esteem, and familial self-esteem) is %99.

Results also showed that mean rhinoplasty applicants' body image was 52.92. Yet, it was 37.88 for non-applicants. In the following table, independent t-test results are represented to compare rhinoplasty applicants to non-applicants' (normal people) body image.

Independent t-test results regarding the comparison of rhinoplasty applicants with non-applicants' (normal people) body image showed that the assumption of the equality of variances was approved based on

F-value=1.576 and P-value=0.2. At the same time, based on t=3.604 and P-value=0.001, there is a significant difference between rhinoplasty applicants and non-applicants' body image.

## DISCUSSION AND CONCLUSION

In the recent years, the number of applicants for cosmetic surgeries has been increased. Hence, this study aims to compare personality characteristics, self-esteem, and body image in rhinoplasty applicants versus non-applicants (normal people) in Bandarabbas. Results showed that rhinoplasty applicants have different personality qualities as compared to non-applicants. That is, in all personality characteristics (except extroversion), applicants' score was significantly higher as compared to non-applicants. In fact, of the most important results of this study regarding personality characteristics is that rhinoplasty applicants are more introvert as compared to non-applicants. It seems that rhinoplasty applicants are secluded introvert individuals. They have a variety of motivations to get sociable. They try to put an end to their isolation by making changes in their appearance. On the other hand, they consider these changes aiming to begin personality changes. Regarding the differences between personality characteristics in cosmetic surgeries applicants versus non-applicants, results correlate with the results reported by Mohammadpanah Ardakan et al [10]. Yet, regarding applicants higher scores in delicateness as compared to non-applicants, they oppose the results reported by Mohammadpanah Ardakan et al [10]. In their study, they found out that cosmetic surgery applicants have lower delicateness score as compared to non-applicants. Zojaji [4] also concluded that cosmetic surgery applicants have higher anti-social personality characteristics as compared to non-applicants. In this study, again, results indicated that applicants are more introvert and less sociable.

Results of the comparison of rhinoplasty applicants versus non-applicants' self-esteem indicated that applicants have a significantly higher self-esteem as opposed to non-applicants. In fact, results showed that rhinoplasty applicants have high self-esteem. Regarding personality characteristics, results demonstrated that applicants are introvert as compared to non-applicants. They also have higher self-esteem in comparison with non-applicants. Results may embrace this conclusion that applicants have a kind of internal self-esteem. This condition has led them to pay attention to their appearance ideals. As a result, they tend to make changes in their personal look. However, it must be noted that these people's higher self-esteem were most likely to be affected by their future surgery. Garrusi et al [11] found out that there is a significant relationship between rhinoplasty and self-esteem. Accordingly, their results correlate with the results of the present study. Yet, results reported by Pecorari et al [2] and Asadi et al [12] are different from the results of this study. In their studies, they realized that the applicants of cosmetic surgeries have lower self-esteem and confidence as compared to non-applicants. It seems that self-esteem can be different based on the population under study. That is sensitivity and attention to beauty is also observed in various societies [12].

Concerning body image, results indicated that applicants have a better body image. In fact, they have a higher body image score as compared to non-applicants. Observations showed that these individuals usually believe that they have more appropriate boy fitness. But, they feel problems in their faces. Hence, they tend to rhinoplasty. In sum, results correlate with the results reported by Brahmand et al [13]. In their study, they found out that individuals satisfied with their bodies have higher self-esteem and characteristics as compared to other individuals.

### Limitations

This study was conducted on rhinoplasty applicants in Bandarabbas County. Hence, conservation must be met in generalizing the results to other groups. Here, questionnaires were used which may be different from the questionnaires applied in other research. As a corollary, the use of various questionnaires leads to different results.

### Suggestions

It is proposed that rhinoplasty applicants first take psychological and body image assessments. Then, it will be possible to provide them with necessary advice and even prevent from improper surgeries. This study was carried out using control-test method. It is suggested that future studies are done using experimental and/or quasi-experimental methods. It will allow us to better refer to their results. This study was merely specific to rhinoplasty. It is suggested that various surgical groups are compared in future studies. It is also

suggested that further studies are conducted on applicants' personality characteristics, self-esteem, and body image concerning their motivations for rhinoplasty.

## ACKNOWLEDGEMENTS

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