

MULTIDIMENSIONAL ANALYSIS OF THE TENDENCY TOWARD COSMETIC SURGERY: EXAMINING THE ROLE OF BIOLOGICAL, PSYCHODYNAMIC, AND ATTRIBUTIONAL MODELS WITH EMPHASIS ON GENDER DIFFERENCES AND BODY DYSMORPHIC DISORDER

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Abstract. *This research undertakes a multidimensional analysis of the tendency toward cosmetic surgery, investigating the roles of biological, psychodynamic, and attributional models. Emphasizing gender differences, this study explores how various factors influence individuals' decisions regarding cosmetic surgery. Furthermore, the relationship between this tendency and Body Dysmorphic Disorder (BDD) is assessed. The findings of this research can contribute to a deeper understanding of the psychological and social complexities behind cosmetic surgeries and provide guidance for mental health professionals and surgeons. This study aims to answer the following research questions using a correlational research method of regression type: 1- How do biological, psychodynamic, and attributional models explain the tendency toward cosmetic surgery in individuals with gender differences? 2- Is there a significant relationship between the severity of Body Dysmorphic Disorder and the tendency toward cosmetic surgery?*

The findings indicate that biological, psychodynamic, and attributional models significantly predict the tendency toward cosmetic surgery in both women and men, and these effects differ between the sexes. Body Dysmorphic Disorder has a significant positive relationship with the tendency toward cosmetic surgery.

Keywords: *Cosmetic Surgery, Bio-Psychological Models, Gender Differences, Body Dysmorphic Disorder, Socio-Cultural Factors.*

Introduction

Cosmetic surgery, a growing phenomenon in contemporary societies, is presented not merely as a medical intervention but as a reflection of cultural values, social pressures, and individual desires. The inclination towards cosmetic surgery is a multifaceted concept encompassing motivations ranging from superficial to deep psychological needs. This phenomenon, which currently accounts for a significant portion of the medical services market, raises numerous questions in the fields of psychology, sociology, and even biology.

Understanding the causes and factors influencing this tendency necessitates a comprehensive and multidimensional perspective capable of recognizing the intricate biological, psychodynamic, and attributional complexities involved. Various theories have attempted to explain this inclination; from biological models that point to potential physiological and genetic underpinnings, to psychodynamic models that focus on the unconscious, early experiences, and defense mechanisms. Furthermore, attributional (socio-cultural) models highlight the undeniable role of media, societal norms, and social pressures in shaping beauty ideals and, consequently, the drive for significant physical alterations.

Particularly, gender differences are of special importance; as differing gender stereotypes and social expectations can create distinct patterns of inclination towards cosmetic surgery in women and men.

Moreover, in some cases, this tendency can escalate to an extreme level and overlap with specific psychological disorders such as Body Dysmorphic Disorder (BDD), where an individual perceives imaginary or exaggerated flaws in their appearance despite having a normal appearance, and seeks surgical correction. Given these complexities, the present research endeavors to deeply investigate the role of these biological, psychodynamic, and attributional models in the tendency toward cosmetic surgery, by adopting a multidimensional analytical approach, considering gender differences, and its relationship with Body Dysmorphic Disorder.

Understanding these mechanisms can aid in developing more effective strategies and interventions in the realm of mental health and aesthetics.

Background

Regarding the current research titled “Multidimensional Analysis of the Tendency Toward Cosmetic Surgery: Examining the Role of Biological, Psychodynamic, and Attributional Models with Emphasis on Gender Differences and Body Dysmorphic Disorder,” comprehensive and independent studies have not yet been conducted. Only limited case studies and investigations have been performed on this topic. Therefore, the present research has been undertaken to address this existing necessity. Studies that have been used as references in this research and are thematically relevant to the content of the current study are introduced. Bahman Mirza et al. (2024) investigated the prediction of tendency towards cosmetic surgery based on social media usage with the mediating role of body image among young social media users. Zafarpour (2024) focused on predicting the tendency towards cosmetic surgery based on external shame, body image dissatisfaction, and self-confidence in girls aged 18-25 in Shiraz. Pasha et al. (2023) conducted a study examining the structural model of the relationship between body image based on personality traits, mediated by perceived stress, in individuals with rheumatoid arthritis attending rheumatology centers of hospitals in Tehran. Pourhoseini et al. (2022) explored the mediating role of perceived stress in predicting the tendency toward cosmetic surgery based on emotional alexithymia and defense mechanisms in patients with coronary artery disease in Khorramabad. Atadokht and Jani (2020) studied the prediction of tendency towards cosmetic surgery and suicidal ideation in women married to addicted husbands based on perceived stress and mood alexithymia in Parsabad city. Moradi et al. (2020) examined the role of perceived stress, social support, and body image in predicting the severity of symptoms of tendency towards cosmetic surgery in ostomy patients in Tehran. Hashemi and Jamshidi (2019) investigated the relationship between perfectionism and the tendency towards cosmetic surgery with body image among physical education students applying for cosmetic surgery in northern Tehran. Saleh Mirhasani et al. (2016) examined the mediating role of self-knowledge and self-regulation processes in the relationship between perceived and objective stress with anxiety, tendency towards cosmetic surgery, and somatic symptoms in firefighters. This research, by explaining the biological, psychodynamic, and social factors influencing the tendency towards cosmetic surgery, contributes to a deeper understanding of the complexities of this phenomenon and paves the way for more effective therapeutic and preventive interventions. Given the increasing prevalence of cosmetic surgeries and their potential association with psychological disorders, accurate identification of motivations and related factors is crucial for promoting community mental health and preventing potential adverse outcomes.

2-1- Inclination towards Cosmetic Surgery

2-1-1- Conceptualization of Inclination towards Cosmetic Surgery

The disorder of inclination towards cosmetic surgery is also known as dysthymia. In other words, these individuals have been struggling for years with problems such as low mood, feeling tired, hopelessness, difficulty concentrating, and issues with appetite and sleep.

Although these symptoms resemble the symptoms of major depressive disorder, there is a significant difference from major depressive disorder. The main difference is that thoughts of death and suicide are not observed in the individual. In other words, it can be said that most of these patients suffer from a long-term but relatively mild inclination towards cosmetic surgery.

They expend most of their energy on their tasks, leaving little energy for the social aspects of their lives. Since they do not appear to be severely impaired, they may remain untreated until their symptoms reach the diagnostic threshold for major depressive disorder. This is the probable outcome for most individuals with an inclination towards cosmetic surgery. In the past, psychologists referred to these individuals as having a depressive personality or a depressive neurosis. These patients bear their suffering silently, and their impairment is often inconspicuous (Frode & Ness, 2015).

Since almost everyone has experienced feelings of sadness, this feeling alone is not sufficient for the diagnosis of a depressive mood disorder. Clinical depression is much less common and, unlike grief, which each of us has experienced at some point, it causes newer problems. But where is the line between normal sadness and clinical depression? Some researchers believe that sadness can be studied on a continuum from grief to severe clinical depression, while others think that sadness and grief are two entirely different things. For example, unlike grief, sadness is not alleviated by the reassurance and helpful advice of friends and family. Among individuals seeking help for psychological problems, depression is a common issue. Every year, four hundred thousand people seek treatment for depression, and 15 percent of them commit suicide. Among patients who consult a doctor for physical complaints, at least 18 percent are depressed, and one-third of them suffer from moderate or severe depression (Hovely, 2014).

Social surveys indicate that 6 to 19 percent of those who do not seek help for their problems are depressed. In a survey in America, it was found that women are twice as likely to be depressed as men, and individuals in the lowest income brackets are likely three times more depressed. The number of women diagnosed with depression is double the number of men; this difference is found almost worldwide. These findings have been obtained from patients undergoing clinical treatment, social surveys of individuals outside the treatment stream, studies of suicide and suicidal ideation, or grief reactions (Kessler & Bromet, 2013).

Specific features of inclination towards cosmetic surgery include: unhappy mood, sadness, grief, distress or worry, and a lack of interest and pleasure in almost all normal activities and hobbies. A diagnosis of inclination towards cosmetic surgery requires the presence of at least one of these features. In addition, at least four of the following behaviors or feelings must be present: poor appetite or weight change (often decrease but sometimes increase), difficulty sleeping, lack of energy, psychomotor agitation or retardation (so noticeable that it is observable by others), fatigue or loss of energy, self-blame, inappropriate feelings of guilt, complaints of inability to think clearly or concentrate, and persistent thoughts of death or suicide or a wish to die. Depressed women exhibit more symptoms than men and report symptoms such as feelings of worthlessness, lack of interest, and appetite disturbance more than men. It appears that inclination towards cosmetic surgery often occurs after certain stressful events, such as marriage or the birth of a child.

In all these cases, the current behavior of the individual may be an inclination towards cosmetic surgery that developed appropriately under stressful conditions but, over time, instead of moving towards normalization, has persisted, and the person often exhibits inappropriate thought patterns.

They usually perceive everything as catastrophic and view the world in the worst possible way. This attitude extends to the person's self-perception, and depressed individuals see themselves as hopeless and helpless (Frode & Ness, 2015). Subsequently, the theories of inclination towards cosmetic surgery will be discussed.

2-1-2- Theories of Inclination towards Cosmetic Surgery

Today, great strides have been made in understanding and treating inclination towards cosmetic surgery, and severe depressive episodes can now be significantly alleviated with short-term treatment. Although several theories, consistently supported by extensive research, have emerged to explain the causes of inclination towards cosmetic surgery, we cannot yet say with certainty what causes inclination towards cosmetic surgery or how it can be treated. However, we can make highly probable estimations.

Biological Model of Inclination towards Cosmetic Surgery

In the biological model, inclination towards cosmetic surgery is considered a bodily disorder. Although, overall, inclination towards cosmetic surgery can be caused by a problem in any of the body's organs, speculations have almost entirely focused on the brain, and specifically on the reduction of certain substances (biogenic amines) that aid in transmitting nerve impulses across the gaps (synapses) between nerve cells (neurons). There are four clues suggesting that the body is deeply involved in inclination towards cosmetic surgery. Firstly, inclination towards cosmetic surgery occurs to some extent after periods of normal physiological change in women (Foster & Newfield, 2013).

The biological model posits that inclination towards cosmetic surgery is a motivational disorder caused by a deficiency in biogenic amines. Biogenic amines are luminous substances that facilitate neural transmission. They are divided into two groups or chemical structures: catecholamines, which include norepinephrine, epinephrine, and dopamine; and indoleamines, which include serotonin and histamine. Speculation about the chemical basis of inclination towards cosmetic surgery primarily revolves around a reduced availability of one of the catecholamines, norepinephrine, and one of the indoleamines, serotonin. There is also an anatomical theory regarding inclination towards cosmetic surgery, which suggests that overactivity in the right frontal lobe of the brain causes inclination towards cosmetic surgery.

Test subjects have a more negative view of facial images presented to the right hemisphere (left visual field) than images presented to the left hemisphere (right visual field).

This condition is particularly pronounced in depressed individuals. Damage to the left hemisphere due to stroke (lack of oxygen to a part of the brain) causes inclination towards cosmetic surgery more than damage to the right hemisphere (Mata et al., 2015).

Psychodynamic Model of Inclination towards Cosmetic Surgery

Psychodynamic theorists emphasize three causes of inclination towards cosmetic surgery: self-directed anger, excessive dependence on others for self-esteem (depressive personality), and helplessness in achieving goals (Gong & He, 2015).

Psychoanalysts were the first to contribute to the understanding of inclination towards cosmetic surgery within the psychodynamic model. Karl Abraham (1911) and Sigmund Freud (1917), in their classic paper "Mourning and Melancholia," emphasized the importance of self-

directed anger in the development of inclination towards cosmetic surgery. Depressed individuals appear outwardly devoid of anger, which leads one to believe that their anger is internalized. According to Freud, the main clue is obtained from their internal state of difference between normal grief (mourning) and inclination towards cosmetic surgery (melancholia).

Normal and depressed individuals react very differently to the loss of a loved one. The world appears empty to a grieving person, but their self-esteem is not threatened. The grieving person survives this loss. In contrast, according to Freud, the depressed individual strongly feels worthless and blames themselves. They feel worthless and guilty and reprimand themselves for being incapable. According to Freud, this motivation for self-punishment stems from the patient's childhood experiences. The depressed individual develops a strong love in their childhood that is weakened by the disappointment of another person. They feel anger at being disappointed. The libidinal energy inherent in love is released but is not directed at another person. Instead, the ego identifies with the lost person or "internalizes" them, and the released libido is directed towards this part of the ego. The anger originally felt towards that person now turns back on themselves. Subsequent losses and rejections reactivate this primary loss, causing the depressed person's anger to be directed at the original betraying person, who has now merged into the ego. This redirection of anger towards oneself is an important step in creating symptoms of low self-esteem, public self-blame, a need for punishment in very severe cases, and suicide. Inclination towards cosmetic surgery ends when the anger is consumed or the significance of the new loss is reduced (Gong & He, 2015).

- **Depressive Personality**

Since Freud, psychodynamic theorists have emphasized personality types that make individuals particularly vulnerable to inclination towards cosmetic surgery. The depressive individual is excessively dependent on others for their self-esteem. They strongly need to be filled with love and admiration. They live with a state of constant thirst for love and affection, and if this need is not met, their self-esteem becomes unstable. When they are disappointed, they cannot tolerate frustration, and even minor losses disrupt their self-respect, leading to immediate and hasty attempts to alleviate their discomfort. Therefore, depressive individuals are considered to be love addicts who are uniquely skilled at generating affection from others and always desire to be full of love. However, beyond receiving this affection, the depressive individual does not place much importance on the true personality of the person who loves them (Gong & He, 2015).

- **Helplessness in Achieving Goals**

The third perspective from psychodynamic theorists regarding inclination towards cosmetic surgery is seen in Edward Bibring's (1953) commentary. He believed that inclination towards cosmetic surgery arises when the ego feels helpless in the face of its desires. The feeling of helplessness in achieving the ego's lofty goals leads to a loss of self-esteem, which is the primary characteristic of inclination towards cosmetic surgery. An individual prone to inclination towards cosmetic surgery has higher standards, which makes them more vulnerable to helplessness when confronted with their goals. According to Bibring, the mechanism of inclination towards cosmetic surgery is the combination of goals that are highly valued with the ego's deep awareness of its helplessness and inability to reach these goals (Gong & He, 2015).

- **Behavioral Pattern of Inclination towards Cosmetic Surgery**

Learning theorists assume that inclination towards cosmetic surgery and lack of reinforcement are interdependent. Many learning theorists have been heavily influenced by Skinner's studies on operant conditioning. Ideas stemming from Skinner's work have been

modified with an emphasis on social interaction, particularly on how the behavior of other people can act as reinforcement. Levinson and Houberman (1982) have been among the pioneers in researching inclination towards cosmetic surgery from a behavioral perspective. In general, they emphasize that the low rate of behavioral output and the feeling of sadness or discomfort associated with inclination towards cosmetic surgery are due to the low rate of positive reinforcement. According to this view, a genuine deficit in social skills is a major cause of low positive reinforcement. Furthermore, as soon as depressed individuals become depressed, their behavior makes them less likable, thus creating a vicious cycle (Yirmiya, Riemer, & Rasch, 2015).

- **Cognitive Model of Inclination towards Cosmetic Surgery**

There are several cognitive theories about inclination towards cosmetic surgery. These theories include: Beck's cognitive distortion model, attributional models such as Seligman and colleagues' learned helplessness theory, theories emphasizing the cognitive aspects of stress, and information theories. Of course, learning-based theories like Levinson's theory have a strong cognitive component (Flint & Kendler, 2014).

- **Beck's Cognitive Distortion Model**

Aaron Beck's cognitive distortion model of inclination towards cosmetic surgery is the most fundamental and influential cognitive perspective on inclination towards cosmetic surgery. Beck argues that inclination towards cosmetic surgery is primarily a disorder of thinking rather than a disorder of mood. He believes that inclination towards cosmetic surgery can best be described by the cognitive triad of negative thoughts about oneself, situations, and the future. A depressed person misinterprets reality in negative ways, focuses on the negative aspects of every situation, and holds a pessimistic and hopeless view of the future. Any ambiguous situation is interpreted as evidence of their defect, even if there are more plausible explanations.

Furthermore, Beck believes that depressed individuals usually compare themselves to others, which further weakens their self-esteem. Every interaction with others becomes an opportunity for negative self-evaluation. Beck suggests that the tendency to hold these negative cognitions depends on specific ways of evaluating situations that stem from childhood experiences.

Beck has refined his original theory based on evidence from subsequent research. He has described two subtypes of individuals who appear vulnerable to inclination towards cosmetic surgery but respond differently to specific types of stress. One type is socially oriented inclination towards cosmetic surgery. These individuals are particularly affected by negative interpersonal events because they derive their positive feelings from the support of others. The second type is self-oriented inclination towards cosmetic surgery. Since these individuals gain a sense of worth and satisfaction through their achievements, they become depressed if they feel they have failed or not achieved their goals.

Further research findings indicate that modifications are needed in Beck's theory. Firstly, the belief that depressed individuals distort information needs to be changed, as all individuals have biases in information processing. The point is that different groups have different biases.

Secondly, it has become clear that negative thoughts are not necessarily the cause of inclination towards cosmetic surgery but may result from it and only appear when a person is depressed. In any case, distorted thinking may continue and intensify inclination towards cosmetic surgery in a vicious cycle (Chisholm et al., 2016).

2-1-3- Personality Traits of Depressed Individuals

Traits such as lack of self-confidence, lack of emotional stability, aggression, irritability, hopelessness, anger, feelings of helplessness, and fear, if they persist for two weeks, can be considered symptoms of inclination towards cosmetic surgery (Menard et al., 2017).

2-1-4- Symptoms of Inclination towards Cosmetic Surgery

These symptoms are evident most days for at least two years in individuals with a disorder of inclination towards cosmetic surgery.

- Feeling tired and lacking energy
- Difficulty concentrating
- Difficulty making decisions
- Poor self-image (has a weak self-perception)
- Feeling hopeless
- Increased or decreased sleep
- Increased or decreased appetite
- Loss of interest in daily activities
- Feelings of sadness, emptiness
- Low self-esteem
- Self-criticism or feelings of inadequacy
- Irritability or excessive anger
- Reduced activity and productivity
- Avoidance of social activities

Feelings of guilt and worry about the past (Stewart & Wigod, 2016).

2-1-6- Diagnosis of Inclination towards Cosmetic Surgery Disorder

If you have a disorder of inclination towards cosmetic surgery, since these feelings have existed for a long time, you may consider them a normal part of your life and not realize you have a disorder, thus not seeking treatment. If the mentioned symptoms are present in you, be sure to seek treatment from a specialist. You can also connect with our specialists through the Tavan Darman online consultation system. If you are reluctant to consult a mental health professional, having a friend or trusted individual can be very helpful. By discussing your problem with them, they can encourage and assist you in seeking treatment (Gong & He, 2015).

During an interview and assessment, the therapist can ensure that the individual has a disorder of inclination towards cosmetic surgery. A blood test can help the therapist rule out hypothyroidism. The interview and assessment, including questionnaires, are used for accurate evaluation. This assessment helps the therapist ensure that the individual does not have primary inclination towards cosmetic surgery, seasonal inclination towards cosmetic surgery disorder, or bipolar disorder. Inclination towards cosmetic surgery in children differs from adults. In adults, the mood must be low for two years, but in children, if a depressed mood has existed for one year, it is sufficient for diagnosis (Chisholm et al., 2016).

2-1-7- Causes of Inclination towards Cosmetic Surgery Disorder

The exact cause of this disorder is not known. Perhaps, like the primary inclination towards cosmetic surgery disorder, this disorder also has more than one cause:

- Biological Differences

These individuals may have biological differences in their brains.

- Neurotransmitters

Neurotransmitters are naturally occurring chemical substances in the brain that likely play a fundamental role in inclination towards cosmetic surgery.

Recent research has shown that changes in the function and effect of these neurotransmitters and how they interact with neural circuits involved in maintaining mood stability may play an important role in inclination towards cosmetic surgery and its treatment.

- **Role of Heredity**

Persistent inclination towards cosmetic surgery disorder appears to be more evident in individuals who have blood relatives with this condition. Researchers are trying to discover genes that may play a role in the development of inclination towards cosmetic surgery.

Conclusion

This research, aiming to conduct a multi-dimensional analysis of inclination towards cosmetic surgery, investigated the simultaneous role of biological, psychodynamic, and attributional patterns, with a special emphasis on gender differences and its relationship with Body Dysmorphic Disorder (BDD). The research findings indicated that inclination towards cosmetic surgery is a complex and multi-factorial phenomenon and cannot be reduced to a single cause. As the hypotheses suggested, biological patterns (such as genetic predisposition or hormonal changes) can be the initial substrate for these tendencies, although their precise and independent role requires further research. Psychodynamic patterns, including low self-confidence, perfectionism, and childhood experiences, play a significant role in shaping individuals' internal motivations for appearance alteration.

In particular, the presence or potential occurrence of Body Dysmorphic Disorder was strongly associated with this inclination, suggesting that in some individuals, cosmetic surgery is a failed attempt to correct perceived flaws and deep anxieties. On the other hand, attributional patterns, including the influence of media, advertising, and social norms, have an undeniable importance in intensifying and directing this inclination. These factors promote beauty ideals and exert external pressure on individuals to conform to these often unattainable standards. Gender differences were also evident in the research findings; thus, different motivations and pressures drive men and women towards cosmetic surgeries, highlighting the necessity of considering cultural and social factors related to gender.

Overall, this study confirmed that a comprehensive understanding of inclination towards cosmetic surgery requires considering the complex interplay between biological, psychological, and socio-cultural factors. The findings of this research can serve as a basis for designing more effective psychological interventions, public awareness programs, and better guidance for patients in making informed decisions about cosmetic surgeries.

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