Medij. istraž. (god. 31, br. 2) 2025. (35-72)
IZVORNI ZNANSTVENI RAD
DOI: 10.22572/mi.31.2.2
Primljeno: lipanj, 2025.

Aesthetic and corrective interventions: changes in self-confidence and social communication

Anthony Ban*
Branka Ličanin**
Božidar Veljković***

ABSTRACT

Aesthetic and corrective procedures significantly enhance individuals' self-confidence and social communication, positively transforming their lives and satisfaction. These interventions provide emotional support and improve self-perception, contributing to safety and environmental interaction. The aim of this study was to examine differences in self-confidence and social communication levels before and after aesthetic and corrective procedures, taking into account the participants' gender and age. The study was conducted on a sample of 150 patients in Pula and Rovinj (Croatia) who underwent various aesthetic and corrective treatments. The Self-Confidence and Social Communication Assessment Scale was applied, and the data were analyzed using IBM SPSS Statistics (version 23). The results of the Wilcoxon test showed statistically significant increases in self-confidence and quality of social communication after the procedures ($p < .001$) across all observed

*Subspecijalist plastične i rekonstruktivne kirurgije Anthony Ban, doktorand, Alma Mater Europaea, Opća bolnica Pula, Hrvatska

**Univ.mag.med.techn. Branka Ličanin, doktorandica, Alma Mater Europaea, Opća bolnica Pula, Hrvatska

***Izv. prof. dr. sc. Božidar Veljković, Alma Mater Europaea, Maribor, Slovenija

variables. Gender-based analysis indicated higher levels of self-confidence and social openness among women compared to men, while older participants showed a more stable increase in emotional security and self-acceptance than younger participants. The Mann–Whitney U test and Kruskal–Wallis test confirmed statistically significant differences in the perception of outcomes based on gender and age ($p < .05$). The findings suggest that aesthetic and corrective procedures affect not only physical appearance but also psychological functioning and social relationships. Observed effects vary according to demographic characteristics, highlighting the need for an individualized approach in planning and implementing aesthetic treatments. In conclusion, the study confirms that aesthetic and corrective procedures can significantly enhance self-confidence and social communication, with gender and age playing a moderating role. The scientific contribution of this research lies in a better understanding of the link between aesthetic procedures, self-confidence, and social communication, which is important for patients' psychological well-being. The study can help guide the development of personalized approaches and strategies to improve patient outcomes.

Keywords: aesthetic procedures, corrective procedures, surgery, self-confidence, social communication

.

Introduction

Aesthetic procedures include treatments aimed at enhancing appearance and emphasizing natural beauty without medical necessity, such as the application of hyaluronic fillers, botulinum toxin, mesotherapy, chemical peels, laser skin treatments, and other non-invasive methods. Corrective procedures, on the other hand, are performed to repair congenital, acquired, or post-traumatic irregularities, such as eyelid correction (blepharoplasty), scar revision, correction of nasal or ear deformities, and removal of moles or other skin lesions. These procedures are carried out by qualified medical professionals, most commonly specialists in dermatology or plastic, reconstructive, and aesthetic surgery, in accordance with established medical standards and ethical guidelines.

Aesthetic and corrective procedures in the 21st century have experienced significant changes and advances, from technological innovations to changes in the approach and philosophy of surgical procedures. One of the key trends in aesthetic and cor-

rective surgery is the emphasis on natural results and minimally invasive techniques (Gold et al., 2020; Romero-Otero et al., 2021; Yamin, McAuliffe and Vasilakis, 2021; Will et al., 2022). Patients are increasingly looking for natural looks without too much alteration in appearance, leading to the popularity of techniques such as lipofilling, which uses one's own fat for filling and shaping, instead of traditional implants (Fontdevila and Marshall, 2019; Mangialardi, Ozil and Lepage, 2021; Marco et al., 2022). In addition, minimally invasive treatments such as botulinum toxin injections and dermal fillers are becoming increasingly popular for correcting fine lines and wrinkles without the need for surgical incisions (Devgan, Singh and Durairaj, 2019; Farolch-Prats and Nome-Chamorro, 2019; Nisreen Mobayed, Julie and Jared Jagdeo, 2020; McKeown 2021; Muchemi, Ajiboye and Ferneini, 2023).

Advances in technology have also brought new opportunities in cosmetic and corrective surgery (Sarwer, 2019). The use of 3D scanning, virtual reality and simulation of the results allows patients to better understand the expected results before the procedure itself (Nquyen et al., 2020; Vles, 2020; Tokgöz and Carro, 2023). This also helps surgeons plan operations and achieve more precise results (Sharaf, 2022). On the other hand, social networks and digital technology have a great influence on the perception of beauty and trends in aesthetic and corrective surgery (Harth, 2017; Arab et al., 2019; Aparicio-Martinez et al., 2019). Patients are increasingly seeking aesthetic procedures to achieve a look that matches the ideals of beauty promoted on social networks and digital platforms (Vendemia and DeAndrea, 2021; Zhang, 2023). Overall, cosmetic surgery in the 21st century is becoming more affordable, personalized and technologically advanced. Patients have more options than ever before, but it's also important to choose certified surgeons and approach treatments with realistic expectations and information.

Alongside these technological and cultural changes, aesthetic and corrective procedures have become ubiquitous, and the reasons for their popularity are diverse and deeply rooted in social and individual dynamics. Many people opt for such procedures to improve their self-confidence and sense of self-worth. Changes in appearance are often perceived as a way to achieve greater self-satisfaction and a better sense of self (Paoli and Procacci, 2019; Hashemi et al., 2020; Elday and Mashaly, 2021; Weitzer and Fried, 2021; Dobosz et al., 2022). Also, people use them to correct physical defects or irregularities, which can be a source of dissatisfaction or complexes (Kirpinar, Ayhan and Guneren, 2021; Laughter et al., 2023). Aesthetic procedures often serve to preserve a youthful appearance, with the aim of slowing down the signs of aging and maintaining vitality (Mojs 2019). In addition, some people opt for such procedures for health reasons, such as improving breathing or reducing the risk of certain health problems (Asimakopoulou, Zavrides and Askitis, 2019; Marco

et al., 2022). The role of the media in shaping beauty ideals is also significant. The term media originates from the Latin word *medium* and denotes a means or an environment. As such, a medium represents "a set of conditions in which something occurs, lives, acts, or exists" (Zgrabljić Rotar, 2023, pp. 19–20), and the influence of social norms and the media also plays an important role, as pressure from the media and advertising can encourage people to strive for perfection and follow trends in appearance (Bonell, Barlow and Grifftihs, 2021; Eldaly and Mashaly, 2021; Walker, 2021; Pearlman et al., 2022; Laughter et al., 2023). Finally, many people opt for cosmetic procedures because it brings them personal satisfaction and joy, improving their quality of life and general well-being (Papadopulos et al., 2019; Papadopulus et al., 2021; McKeown, 2021; Koc and Ayyildiz, 2023).

Corrective and aesthetic procedures can significantly enhance an individual's self-confidence on multiple levels. When a person notices positive changes in their body following a procedure – such as the removal of skin imperfections or body contouring – a sense of satisfaction and greater control over their appearance emerges, further strengthening confidence and self-assurance (Borujeni et al., 2020; Rothermel et al., 2020; Draelos, 2021). This sense of control over one's appearance and life is further supported by studies emphasizing the importance of perceived personal power and autonomy in the process of change (Atiyeh, Rubeiz, and Hayek, 2020; Őry, Láng, and Meskó, 2023). A personalized approach to treatments promotes feelings of autonomy and satisfaction with one's appearance (Golshani et al., 2016; Cohen et al., 2022), while positive reactions from others – such as compliments or recognition of changes – further validate the decision to undergo the procedure and enhance self-esteem (Elliot, 2008; Davis, 2013).

Moreover, altering the perception of physical flaws and aligning external appearance with internal identity contributes to a stronger sense of personal value (Margraf, Meyer, and Lavallee, 2013). Such physical changes often result in psychological benefits, including reduced stress and anxiety (Tokgöz and Carro, 2023). Overcoming insecurities represents a crucial aspect of this process, as aesthetic procedures allow for liberation from the emotional burden associated with dissatisfaction with one's appearance, thereby increasing emotional stability (Davis, 2013). In the long term, these changes contribute to greater life satisfaction and overall quality of life (Adams, 2010).

Reducing negative social comparisons is also an important psychological effect, as increased self-confidence leads to greater resilience against societal beauty standards and decreases stress associated with social evaluation (Asimakopoulou, Zavrides, and Askitis, 2020). Inner satisfaction with one's appearance positively influences professional and social life, as individuals who feel comfortable in their own

skin demonstrate greater motivation, creativity, and more successful interpersonal relationships (Hamermesh, 2011). This satisfaction stems from a holistic approach to self-acceptance (Kinnunen, 2010) and can encourage positive changes in lifestyle habits – adopting healthier diets and regular physical activity – which further strengthens self-confidence and overall well-being (Margraf, Meyer, and Lavallee, 2013). Importantly, self-confidence is not limited to external appearance but also encompasses emotional stability, self-acceptance, and perception of personal value (Popov, 2019).

At the same time, increased satisfaction with appearance directly affects the quality of social interactions, fostering greater openness, reduced social anxiety, and improved professional relationships. Individuals who feel secure and positive in their bodies are better able to form new connections and participate in social situations with ease (Parker, 2010; Smith and Collins, 2009; Dimbleby and Burton, 2020). Enhanced self-confidence contributes to freer expression of opinions and emotions, resulting in more natural and positive interactions (Sampthirao, 2016; Najjaran Toussi and Shareh, 2019). Emotional support during the process further strengthens resilience and stability, helping maintain long-term positive effects (Heyes and Jones, 2016).

In a professional context, increased self-confidence contributes to clearer verbal and non-verbal communication, strengthening interpersonal relationships and trust (Santos et al., 2023). Furthermore, satisfaction with appearance reduces stress in social situations and enables more authentic, spontaneous communication (Borujeni et al., 2020; Skwirczyńska et al., 2022). Over time, heightened self-confidence positively impacts emotional relationships, enhancing stability, openness, and intimacy in interpersonal connections (Yıldız and Selimen, 2015; Asimakopoulou, Zavrides, and Askitis, 2020). Therefore, aesthetic and corrective procedures, combined with an internal sense of satisfaction and emotional balance, contribute to the development of a richer and more fulfilling social life.

In research on the psychosocial outcomes of aesthetic and corrective procedures, it is important to distinguish motives, expectations, and outcomes by gender and age, since empirical evidence consistently shows that these factors moderate both the intensity and the duration of psychological changes following intervention. Among men, a series of quantitative studies have identified specific predictors of acceptance of aesthetic procedures – body dissatisfaction, greater exposure to television and social media, and the phenomenon of *masculine gender-role stress* are associated with a higher willingness to undergo such procedures. This set of determinants implies that men often direct their motives toward functional and status-related goals – the desire to improve professional presentation, vitality, and competitiveness – rather

than toward achieving aesthetic perfection for purely socio-emotional reasons (Abbas and Karadavut, 2017).

Among women, motives are more frequently linked to perceived social norms, internal body valuation, and the emotional consequences of appearance dissatisfaction. A large-sample study in Saudi Arabia found that individuals with a history of cosmetic surgery show greater "acceptance" of such procedures, and that men and women may evaluate their bodies differently (Al Ghadeer et al., 2021). Empirical evidence from clinical and prospective studies consistently shows that most patients experience improved satisfaction with their appearance and often a mild but significant increase in overall self-esteem in the short term, whereas long-term changes in self-esteem tend to be less pronounced and highly dependent on patients' preoperative psychological structure (von Soest et al., 2009; von Soest et al., 2011).

Age is an additional key moderator: younger patients (e.g., adolescents and young adults) more frequently report motives related to identity, online self-presentation, and social validation, while exposure to selfies and digital appearance manipulation practices increases the consideration of aesthetic procedures in this group (Walker, 2021; Parsa et al., 2021). Such factors amplify social comparison and body dissatisfaction, facilitating cognitive mechanisms that lead to the decision to undergo surgery. In contrast, middle-aged and older groups more often cite motives related to preserving youthfulness and emotional stability; in these groups, postoperative benefits often manifest through reduced fear of negative evaluation and increased psychological security, rather than through strong changes in online self-presentation (von Soest et al., 2011; Radman and Pourhoseinali, 2022).

Prospective and longitudinal studies measuring pre- and post-surgery states (pre–post design) provide the most robust evidence of causal effects. Von Soest et al. (2009; 2011) documented improvements in appearance satisfaction and small but significant increases in self-esteem six months and five years after surgery in Norwegian prospective studies, noting that patients with more pronounced preoperative psychological problems achieved less positive outcomes. Similarly, studies focusing on facial procedures show that preoperative levels of self-esteem, self-efficacy, and expectations are strong predictors of postoperative satisfaction; low preoperative values or dysfunctional expectations often predict less stable or less positive psychosocial effects (Yin et al., 2016; Radman and Pourhoseinali, 2022).

Regarding social communication, consensus in the literature indicates that aesthetic interventions can reduce social inhibition and increase social engagement, but the effect typically manifests through two distinct dimensions: (1) increased confidence in social and emotional interactions (more common among women), and (2) im-

proved perceived competence and authority in professional contexts (more common among men). Meta-analyses and systematic reviews emphasize that such effects are frequent but heterogeneous: differences in study design, measurement instruments (e.g., Rosenberg's Self-Esteem Scale and specific appearance satisfaction scales), and timing of measurements make it difficult to precisely quantify the durability of these changes (Honigman, Phillips and Castle, 2004; von Soest et al., 2009).

With regard to clinical implications, the literature supports the necessity of systematic preoperative psychological screening, clearly defined and realistic patient expectations, and individualized counseling that takes both gender and age into account. When expectations are well-aligned and the patient does not exhibit significant pre-existing psychopathological tendencies (such as body dysmorphic disorder), the chances for long-term improvement in self-esteem and satisfactory changes in social communication are higher (Sarwer, 1998; von Soest et al., 2011). Furthermore, given the strong influence of digital media on younger groups, the assessment of social media impact and online self-presentation habits should become a standard part of preoperative evaluation, and educating patients about the differences between the temporary "online effect" and stable psychological benefits should be an integral part of the information process (Walker, 2021; Parsa et al., 2021).

Materials and methods

Aim, hypothesis and variables

The aim of the work is to determine the differences in self-confidence and social communication in patients before and after aesthetic and corrective procedures. There are one general and two auxiliary hypotheses. The general hypothesis is H_o: Aesthetic and corrective interventions contribute to increasing self-confidence and improving the quality of social communication. The auxiliary hypotheses are: H_1: There is a statistically significant variation in how men and women perceive an increase in self-confidence and an improvement in the quality of social communication after aesthetic and corrective procedures; H_2: There are significant statistical differences in the way different age groups perceive an increase in self-confidence and an improvement in the quality of social communication after aesthetic and corrective procedures. The independent variables of the research are: the gender of the respondent and the age of the respondent. Dependent variables are respondents' attitudes about self-confidence and social communication.

Instruments used in the research

The scaling technique was used in the research part of the work. The instrument that was constructed for the purposes of this research. The Self-Confidence and Social Communication Assessment Scale was developed to assess two key dimensions relevant to personal and social functioning: self-confidence and social communication. The scale consists of 20 statements, of which 10 items (items 1–10) refer to the self-confidence dimension, and 10 items (items 11–20) refer to the social communication dimension. Participants evaluated each statement using a five-point Likert scale, where 1 = strongly disagree and 5 = strongly agree. Higher scores indicate a greater level of self-confidence and more effective social communication skills. In addition to the Self-Confidence and Social Communication Assessment Scale, the questionnaire included several sociodemographic questions aimed at obtaining relevant background information about participants. These questions referred to gender and age, and were used to enable a more detailed interpretation of the obtained results. The scale was conducted twice: first before the intervention, and then at least nine months after the intervention.

Description of the procedure and participants

The research was conducted during the period from September 2023 to March 2024 in the territory of Pula and Rovinj (Croatia). The research sample consisted of 150 respondents who underwent various aesthetic and corrective procedures. Of the total number of respondents, 56.7% are women, and 43.3% are men. When it comes to age, 40.7% of respondents were under 30 years old, 31.3% of respondents were between 31 and 50 years old, 28% of respondents were over 51 years old.

Statistical data processing

The results obtained from the research were processed using the IBM SPSS Statistics (version 23) program for data processing. A quantitative approach to the obtained results was performed. A descriptive scientific-research method was used for the presentation. In the framework of statistical data processing, the following parameters were applied: sample size – N; descriptive statistics – frequencies (f), arithmetic mean (M) and standard deviation (Sd), minimum value (min), maximum value (max); Kolmogorov-Smirnov test and Shapiro-Wilk test for determining data distribution; Mann-Whitney U test for determining statistically significant differences in respondents' answers according to the first independent variable (sex of respondents); and the Kruskal–Wallis test to determine statistically significant differ-

ences in respondents' responses according to the second independent variable (age of respondents). The Wilcoxon signed-rank test tested differences before and after the intervention. The internal consistency of the scale and statements was calculated using Cronbach's alpha coefficients, and correlation coefficients were computed from statement to statement.

Results

The results are presented in four parts: reliability measure, initial assessement, final assessement, and comparison of differences between the final and initial assessment.

Reliability measure - Cronbach's alpha and correlation coefficients

The reliability of the scale was assessed using Cronbach's alpha. Cronbach's alpha value of .985 is considered excellent reliability (>0.90) (table 1).

Table 1. Reliability statistics

Tablica 1. Statistike pouzdanosti

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of items
.985	.985	20

Source: Own research, 2023.

Table 2 shows the cross-domain correlation matrix, which provides an insight into the relationship between the different variables in the study. These results indicate different levels of correlation between individual domains, which may be important for understanding the mutual relationships between the various factors that were examined.

Table 2. Interdomain correlation matrix for the Self-confidence and Social Communication Assessment Scale

Tablica 2. Matrica međudomenske korelacije za Skalu procjene samopouzdanja i socijalne komunikacije

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	1.000	.811	.758	.788	.755	.716	.808	.874	.768	.744	.892	.902	.801	.823	.793	.728	.700	.758	.754	.750
2	.811	1.000	.896	.897	.887	.802	.889	.798	.842	.823	.759	.769	.695	.733	.709	.630	.645	.666	.672	.659
3	.785	.896	1.000	.877	.903	.836	.903	.752	.827	.853	.757	.751	.701	.730	.709	.638	.650	.649	.648	.651
4	.788	.897	.877	1.000	.889	.847	.897	.792	.893	.840	.762	.762	.687	.747	.728	.658	.676	.664	.659	.649
5	.755	.887	.903	.889	1.000	.824	.872	.741	.846	.848	.722	.733	.668	.714	.694	.629	.633	.641	.633	.610
6	.716	.802	.836	.847	.824	1.000	.865	.686	.820	.767	.693	.686	.643	.689	.665	.594	.633	.588	.595	.583
7	.808	.889	.903	.897	.872	.865	1.000	.798	.860	.832	.782	.787	.720	.752	.741	.668	.700	.682	.682	.670
8	.847	.798	.752	.792	.741	.686	.798	1.000	.820	.718	.866	.863	.781	.815	.782	.720	.699	.753	.743	.742
9	.768	.842	.827	.893	.846	.820	.860	.820	1.000	.852	.752	.756	.689	.736	.723	.660	.653	.646	.653	.643
10	.744	.823	.853	.840	.848	.767	.832	.718	.852	1.000	.721	.730	.662	.735	.685	.633	.620	.605	.629	.616
11	.892	.759	.7757	.762	.722	.693	.782	.886	.752	.721	1.000	.940	.860	.860	.811	.776	.776	.771	.793	.802
12	.902	.769	.751	.762	.733	.686	.787	.863	.756	.730	.940	1.000	.897	.891	.858	.792	.785	.801	.813	.817
13	.801	.695	.701	.687	.668	.643	.720	.781	.689	.662	.860	.897	1.000	.851	.930	.881	.850	.862	.900	.890
14	.823	.733	.730	.747	.714	.689	.752	.815	.736	.735	.860	.891	.851	1.000	.845	.767	.745	.766	.790	.789
15	.793	.709	.709	.728	.694	.665	.741	.782	.723	.685	.811	.858	.930	.845	1.000	.874	.872	.844	.888	.860
16	.728	.630	.638	.658	.629	.594	.668	.720	.660	.633	.776	.792	.881	.767	.874	1.000	.874	.844	.888	.860
17	.700	.645	.650	.676	.633	.633	.700	.699	.653	.620	.776	.785	.850	.745	.872	.855	1.000	.796	.845	.834
18	.758	.666	.649	.664	.641	.588	.682	.753	.646	.605	.771	.801	.862	.766	.844	.873	.796	1.000	.911	.903
19	.751	.672	.648	.659	.633	.595	.682	.743	.653	.629	.793	.813	.900	.790	.888	.907	.845	.911	1.000	.926
20	.750	.659	.651	.649	.610	.583	.670	.742	.643	.616	.802	.817	.890	.789	.860	.901	.834	.903	.926	1.000

Source: Own research, 2023.

Table 3. Statistics by item

Tablica 3. Statistika po stavkama

Statement	Scale Mean if Item Deleted	Scale Variajnce if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
I believe in my inner strength and worth.	78.5933	221.727	.892	-	.984
I feel accepted and appreciated in the company of others.	78.793	221.221	.867	-	.984
I work regularly to improve my skills and abilities.	78.7767	221.345	.863	-	.984
I express my views and opinions with ease.	78.8067	221.360	.875	-	.984
I believe I have the potential to achieve my goals.	78.267	222.592	.846	-	.984
I feel ready to face the challenges ahead.	78.7500	224.369	.802	-	.984
I get satisfaction from life and my achievements.	78.7633	219.713	.888	-	.984
I accept myself completely, including my flaws.	78.6200	223.039	.879	-	.984
I feel safe and confident in most situations.	78.8100	221.011	.858	-	.984
I believe in myself and my abilities to handle whatever life throws at me.	78.9400	220.592	.825	-	.984
I easily start a conversation with strangers.	78.6433	221.534	.902	-	.984
I enjoy talking to different people.	78.7100	219.926	.918	-	.984
I feel comfortable in social situations.	78.8100	218.823	.898	-	.984
I express myself easily and rent out my ideas.	78.7933	221.027	.883	-	.984
I fit in well with group activities.	78.9033	217.292	.900	-	.984
I smile naturally and maintain a positive atmosphere.	78.8933	219.534	.850	-	.984

I feel relaxed and safe in the company of others.	78.9433	2220.094	.725	-	.984
I regularly step out of my comfort zone in social situations.	78.9200	220.816	.849	-	.984
I believe that I am capable of making deeper connections with other people.	78.9067	219.362	.866	-	.984
I enjoy a variety of social interactions.	78.9100	219.835	.857	-	.984

Source: Own research, 2023.

The total item statistics table shows "Cronbach's alpha if statement deleted" in the last column, as illustrated below. This column represents the value that Cronbach's alpha would be if that particular statement were deleted from the scale. We can see that removing either statement would lead to a lower Cronbach's alpha. Therefore, we would not like to remove these statements (table 3).

Initial assessment

Results of descriptive statistical analysis

Out of the total number of respondents, 78.7% of respondents said that they agree or completely agree with the criterion I believe in my inner strength and value; for the criterion, I feel accepted and appreciated in the company of other 72% of respondents; for the determinant, I regularly work on improving my skills and abilities 68.7% of respondents; 71.3% of respondents express their views and opinions with ease; for the determinant, I believe that I have the potential to achieve my goals, 70.6% of respondents; 68.7% of respondents feel ready to face the challenges ahead; for the criterion I achieve satisfaction from life and my achievements 70% of respondents; as a criterion, I accept myself completely, including my shortcomings 80.1% of respondents; for the criterion, I feel safe and confident in most situations, 70.1% of respondents; for the determinant, I believe in myself and my abilities to cope with everything that life brings 66.7% of respondents; for the criterion, I easily start a conversation with unknown persons 77.3% of respondents; for the determinant, I enjoy conversations with different people 76.7% of respondents; for the determinant, I feel comfortable in social situations 73.3% of respondents; for the criterion, I express myself easily and share my ideas with 72.7% of respondents; 69.3%

of the respondents said that I fit in well with group activities; for the determinant, I smile naturally and maintain a positive atmosphere 69.3% of respondents; for the criterion, I feel relaxed and safe in the company of other 68% of respondents; for the determinant, I regularly leave my comfort zone in social situations 68.7% of respondents; for the determinant, I believe that I am capable of achieving deeper connections with other people 68% of respondents; for the determinant, I enjoy various social interactions 67.3% of respondents. The lowest arithmetic mean (M=3.8400) was recorded for the determinant I believe in myself and my ability to cope with everything that life brings, while the highest standard deviation was recorded for the determinant I feel comfortable in social situations (Sd=1.04590) (table 4).

Table 4. Descriptive statistics of statements about self-confidence and social communication at the initial assessment

Tablica 4. Deskriptivna statistika tvrdnji o samopouzdanju i socijalnoj komunikaciji na početnoj procjeni

Statement	f(1)	f(2)	f(3)	f(4)	f(5)	N	M	Sd	Min	Max
I believe in my inner strength and worth.	0	8	24	47	71	150	4.2067	.89964	2	5
I feel accepted and appreciated in the company of others.	0	11	31	51	57	150	4.0267	.94085	2	5
I work regularly to improve my skills and abilities.	1	10	36	49	54	150	3.9667	9.6528	1	5
I express my views and opinions with ease.	0	11	32	52	55	150	4.0067	.93763	2	5
I believe I have the potential to achieve my goals.	0	8	36	51	55	150	4.0200	.90835	2	5
I feel ready to face the challenges ahead.	0	9	38	49	54	150	3.9867	.92676	2	5
I get satisfaction from life and my achievements.	4	9	32	49	56	150	3.9600	1.03548	1	5
I accept myself completely, including my flaws.	0	4	25	48	73	150	4.2667	.83277	2	5
I feel safe and confident in most situations.	0	12	32	53	53	150	3.9800	.94457	2	5
I believe in myself and my abilities to handle whatever life throws at me.	2	16	32	54	46	150	3.8400	1.02374	1	5

I easily start a conversation with strangers.	0	10	24	48	68	150	4.1600	.92743	2	5
I enjoy talking to different people.	0	12	23	48	67	150	4.1333	.95304	2	5
I feel comfortable in social situations.	3	13	24	50	60	150	4.0067	1.04590	1	5
I express myself easily and rent out my ideas.	0	14	27	55	54	150	3.9933	.95886	2	5
I fit in well with group activities.	4	13	29	48	56	150	3.9267	1.07502	1	5
I smile naturally and maintain a positive atmosphere.	2	14	30	52	52	150	3.9200	1.02007	1	5
I feel relaxed and safe in the company of others.	3	14	31	52	50	150	3.8800	1.04220	1	5
I regularly step out of my comfort zone in social situations.	0	15	32	54	49	150	3.9133	.96889	2	5
I believe that I am capable of making deeper connections with other people.	2	14	32	50	52	150	3.9067	1.02549	1	5
I enjoy a variety of social interactions.	1	16	32	50	51	150	3.8933	1.01761	1	5

Source: Own research, 2023.

Kolmogorov-Smirnov test results

The Kolmogorov-Smirnov test was performed for all dimensions used in the self-confidence and social communication assessment scale at the final assesment. Based on the results presented in Table 5, it can be concluded that none of the variables has a normal distribution. This is based on statistically significant results of all conducted Kolmogorov-Smirnov tests at the $p < 0.05$ significance level. Therefore, in further research, non-parametric tests will be used to test statistically significant subsamples, given that they do not require the presence of normality of the distribution of the variables studied (Pallant 2017).

Table 5. Results of the Kolmogorov-Smirnov test of statements about self-confidence and social communication at the initial assessment

Tablica 5. Rezultati Kolmogorov-Smirnov testa tvrdnji o samopouzdanju i socijalnoj komunikaciji na početnoj procjeni

Statement	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	p	Statistic	df	p
I believe in my inner strength and worth.	.284	150	.000	.791	150	.000
I feel accepted and appreciated in the company of others.	.230	150	.000	.834	150	.000
I work regularly to improve my skills and abilities.	.218	150	.000	.849	150	.000
I express my views and opinions with ease.	.222	150	.000	.839	150	.000
I believe I have the potential to achieve my goals.	.226	150	.000	.839	150	.000
I feel ready to face the challenges ahead.	.223	150	.000	.842	150	.000
I get satisfaction from life and my achievements.	.216	150	.000	.840	150	.000
I accept myself completely, including my flaws.	.297	150	.000	.784	150	.000
I feel safe and confident in most situations.	.215	150	.000	.843	150	.000
I believe in myself and my abilities to handle whatever life throws at me.	.229	150	.000	.865	150	.000
I easily start a conversation with strangers.	.271	150	.000	.800	150	.000
I enjoy talking to different people.	.265	150	.000	.801	150	.000
I feel comfortable in social situations.	.231	150	.000	.826	150	.000
I express myself easily and rent out my ideas.	.229	150	.000	.835	150	.000
I fit in well with group activities.	.221	150	.000	.843	150	.000
I smile naturally and maintain a positive atmosphere.	.225	150	.000	.852	150	.000
I feel relaxed and safe in the company of others.	.226	150	.000	.857	150	.000
I regularly step out of my comfort zone in social situations.	.222	.150	.000	.850	150	.000
I believe that I am capable of making deeper connections with other people.	.216	150	.000	.855	150	.000
I enjoy a variety of social interactions.	.215	150	.000	.856	150	.000

Source: Own research, 2023.

Mann-Whitney U test results

The results obtained by the Man-Whitney U test, shown in table 6, indicate that there are no differences in the respondents' attitudes in relation to gender regarding the statements I feel ready to face the challenges ahead, I achieve satisfaction from life and my achievements. I feel safe and confident in most situations, I believe in myself and my ability to deal with everything that life brings and I feel relaxed and safe in the company of others, while statistically significant differences in attitudes were observed for other statements. Summarizing the results, it can be concluded that there are statistically significant differences in attitudes in relation to gender regarding claims about self-confidence and social communication at the initial assessment. Female respondents tended to give higher ratings than male respondents, indicating slightly higher self-perceived self-confidence and social communication.

Table 6. Mann-Whitney's U test - The difference in attitudes of respondents in relation to gender regarding claims about self-confidence and social communication at the initial assessment

Tablica 6. Mann-Whitney U test - Razlika u stavovima ispitanika s obzirom na spol u vezi s tvrdnjama o samopouzdanju i socijalnoj komunikaciji pri početnoj procjeni

Statement	Mann-Whitney U	Wilcoxon W	Z	p
I believe in my inner strength and worth.	2136.000	5791.000	-2.564	**.010**
I feel accepted and appreciated in the company of others.	2214.000	5869.000	-2.197	**.028**
I work regularly to improve my skills and abilities.	2212.000	5867.000	-2.195	**.028**
I express my views and opinions with ease.	2243.000	5898.000	-2.078	**.038**
I believe I have the potential to achieve my goals.	2161.500	5816.500	-2.406	**.016**
I feel ready to face the challenges ahead.	2330.000	5985.000	-1.727	.084
I get satisfaction from life and my achievements.	2302.500	5957.500	-1.836	.066
I accept myself completely, including my flaws.	2093.500	5748.500	-2.756	**.006**
I feel safe and confident in most situations.	2276.000	5931.000	-1.943	.052
I believe in myself and my abilities to handle whatever life throws at me.	233.500	5985.500	-1.714	.087
I easily start a conversation with strangers.	2135.500	5790.500	-2.550	**.011**
I enjoy talking to different people.	2197.000	5852.000	-2.294	**.022**
I feel comfortable in social situations.	2160.000	5815.000	-2.416	**.016**

I express myself easily and rent out my ideas.	2117.000	5772.000	-2.584	**.010**
I fit in well with group activities.	2244.000	5899.000	-2.064	**.039**
I smile naturally and maintain a positive atmosphere.	2207.500	5862.500	-2.209	**.027**
I feel relaxed and safe in the company of others.	2277.000	5932.000	-1.928	.054
I regularly step out of my comfort zone in social situations.	224.000	5895.000	-2.080	**.038**
I believe that I am capable of making deeper connections with other people.	2176.500	5831.500	-2.329	**.020**
I enjoy a variety of social interactions.	2165.000	5820.000	-2.372	**.018**

Source: Own research, 2023.

Kruskal–Wallis test results

According to the results of the Kruskal–Wallis test, shown in table 7, there are statistically significant differences in the attitudes of respondents in relation to age in relation to statements related to self-confidence and social communication at the initial assessment ($p<.05$). In general, older respondents reported higher levels of self-confidence and more positive social communication compared to younger participants.

Table 7. Kruskal–Wallis test - The difference in the attitudes of respondents in relation to age regarding claims about self-confidence and social communication at the initial assessment

Tablica 7. Kruskal-Wallis test - Razlika u stavovima ispitanika s obzirom na dob u vezi s tvrdnjama o samopouzdanju i socijalnoj komunikaciji pri početnoj procjeni

Statement	Chi-square	df	p
I believe in my inner strength and worth.	67.218	2	**.000**
I feel accepted and appreciated in the company of others.	60.134	2	**.000**
I work regularly to improve my skills and abilities.	56.508	2	**.000**
I express my views and opinions with ease.	57.345	2	**.000**
I believe I have the potential to achieve my goals.	54.131	2	**.000**
I feel ready to face the challenges ahead.	50.169	2	**.000**

I get satisfaction from life and my achievements.	53.011	2	**.000**
I accept myself completely, including my flaws.	59.595	2	**.000**
I feel safe and confident in most situations.	50.089	2	**.000**
I believe in myself and my abilities to handle whatever life throws at me.	50.417	2	**.000**
I easily start a conversation with strangers.	60.160	2	**.000**
I enjoy talking to different people.	59.461	2	**.000**
I feel comfortable in social situations.	49.789	2	**.000**
I express myself easily and rent out my ideas.	57.586	2	**.000**
I fit in well with group activities.	46.297	2	**.000**
I smile naturally and maintain a positive atmosphere.	48.096	2	**.000**
I feel relaxed and safe in the company of others.	41.948	2	**.000**
I regularly step out of my comfort zone in social situations.	47.784	2	**.000**
I believe that I am capable of making deeper connections with other people.	49.622	2	**.000**
I enjoy a variety of social interactions.	47.569	2	**.000**

Source: Own research, 2023.

Final assessment

Results of descriptive statistical analysis

Out of the total number of respondents, 89.3% of respondents said that they agree or completely agree with the criterion I believe in my inner strength and value; for the determinant, I feel accepted and appreciated in the company of other 83.3% of respondents; for the determinant, I regularly work on improving my skills and abilities 88.7% of respondents; for the determinant, I express my views and opinions with ease 82% of respondents; for the criterion, I believe that I have the potential to achieve my goals, 84% of respondents; for the target, I feel ready to face the challenges that come 95.7% of respondents; for the criterion I achieve satisfaction from life and my achievements 90% of respondents; as a criterion, I accept myself completely, including my shortcomings 90.6% of respondents; for the criterion, I feel safe and confident in most situations, 83.3% of respondents; for the determinant, I believe in myself and my abilities to cope with everything that life brings 79.3% of respondents; for reference, I easily start a conversation with unknown persons 89.3% of respondents; for the criterion, I enjoy conversations with differ-

ent people 84.7% of respondents; for the determinant, I feel comfortable in social situations 84% of respondents; for the criterion, I express myself easily and share my ideas with 86.7% of respondents; for the criterion, I fit well into group activities 80% of respondents; for the determinant, I smile naturally and maintain a positive atmosphere 78% of respondents; for the criterion, I feel relaxed and safe in the company of other 76.3% of respondents; for the determinant, I regularly leave my comfort zone in social situations 78.6% of respondents; for the determinant, I believe that I am capable of achieving deeper connections with other people 77.3% of respondents; 80% of the respondents say that I enjoy various social interactions. The lowest arithmetic mean (M=4.173) was recorded for the determinant I fit well in group activities, which also recorded the highest standard deviation (Sd =.87275) (table 8).

Table 8. Descriptive statistics of statements about self-confidence and social communication on the final assessment

Tablica 8. Deskriptivna statistika tvrdnji o samopouzdanju i socijalnoj komunikaciji na završnoj procjeni

Statement	**f(1)**	**f(2)**	**f(3)**	**f(4)**	**f(5)**	**N**	M	**Sd**	**Min**	**Max**
I believe in my inner strength and worth.	0	2	14	39	95	150	4.5133	.72108	2	5
I feel accepted and appreciated in the company of others.	0	2	23	54	71	150	4.2933	.77327	2	5
I work regularly to improve my skills and abilities.	0	1	16	57	76	150	.43867	.70270	2	5
I express my views and opinions with ease.	0	1	23	58	68	150	.42867	.74489	2	5
I believe I have the potential to achieve my goals.	0	2	22	65	61	150	4.2333	.74561	2	5
I feel ready to face the challenges ahead.	0	0	8	71	71	150	4.4200	.59382	3	5
I get satisfaction from life and my achievements.	0	1	14	56	79	150	4.4200	.68806	2	5
I accept myself completely, including my flaws.	0	3	14	53	80	150	4.4000	.74185	2	5
I feel safe and confident in most situations.	0	3	22	51	74	150	4.3067	.79382	2	5

I believe in myself and my abilities to handle whatever life throws at me.	0	3	28	57	62	150	4.1867	.80591	2	5
I easily start a conversation with strangers.	0	0	16	49	85	150	4.4600	.68179	3	5
I enjoy talking to different people.	0	2	21	49	78	150	4.3533	.76970	2	5
I feel comfortable in social situations.	0	3	21	57	69	150	4.2800	.77823	2	5
I express myself easily and rent out my ideas.	0	1	19	60	70	150	4.3267	.71884	2	5
I fit in well with group activities.	0	8	22	56	64	150	4.1733	.87275	2	5
I smile naturally and maintain a positive atmosphere.	0	5	28	49	68	150	4.2000	.85922	2	5
I feel relaxed and safe in the company of others.	0	3	32	56	59	150	4.1400	.81948	2	5
I regularly step out of my comfort zone in social situations.	0	4	28	59	59	150	4.1533	.81707	2	5
I believe that I am capable of making deeper connections with other people.	0	3	31	51	65	150	4.1867	.83051	2	5
I enjoy a variety of social interactions.	0	4	26	57	63	150	4.1933	.81674	2	5

Source: Own research, 2023.

Kolmogorov-Smirnov test results

The Kolmogorov-Smirnov test was performed for all dimensions used in the self-confidence and social communication assessment scale at the final assessment. Based on the results presented in Table 9, it can be concluded that none of the variables has a normal distribution. This is based on statistically significant results of all conducted Kolmogorov-Smirnov tests at the $p < 0.05$ significance level. In addition, the Shapiro-Wilk test was applied to further assess the normality of the data. The results were consistent with those of the Kolmogorov-Smirnov test, confirming that all examined variables deviated significantly from a normal distribution ($p < 0.05$). Therefore, in further research, non-parametric tests will be used to test statistically

significant subsamples, given that they do not require the presence of normality of the distribution of the variables studied (Pallant 2017).

Table 9. Results of the Kolmogorov-Smirnov test of statements about self-confidence and social communication at the final assessment

Tablica 9. Rezultati Kolmogorov-Smirnov testa tvrdnji o samopouzdanju i socijalnoj komunikaciji na završnoj procjeni

Statement	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	p	Statistic	df	p
I believe in my inner strength and worth.	.383	150	.000	.685	150	.000
I feel accepted and appreciated in the company of others.	.293	150	.000	.784	150	.000
I work regularly to improve my skills and abilities.	.315	150	.000	.759	150	.000
I express my views and opinions with ease.	.284	150	.000	.787	150	.000
I believe I have the potential to achieve my goals.	.255	150	.000	.203	150	.000
I feel ready to face the challenges ahead.	.309	150	.000	.733	150	.000
I get satisfaction from life and my achievements.	.327	150	.000	.747	150	.000
I accept myself completely, including my flaws.	.324	150	.000	.745	150	.000
I feel safe and confident in most situations.	.302	150	.000	.777	150	.000
I believe in myself and my abilities to handle whatever life throws at me.	.257	150	.000	.812	150	.000
I easily start a conversation with strangers.	.352	150	.000	.721	150	.000
I enjoy talking to different people.	.320	150	.000	.762	150	.000
I feel comfortable in social situations.	.283	150	.000	.789	150	.000
I express myself easily and rent out my ideas.	.292	150	.000	.778	150	.000
I fit in well with group activities.	.255	150	.000	.805	150	.000
I smile naturally and maintain a positive atmosphere.	.277	150	.000	.801	150	.000
I feel relaxed and safe in the company of others.	.246	150	.000	.819	150	.000
I regularly step out of my comfort zone in social situations.	.243	.150	.000	.820	150	.000
I believe that I am capable of making deeper connections with other people.	.270	150	.000	.806	150	.000
I enjoy a variety of social interactions.	.258	150	.000	.810	150	.000

Source: Own research, 2023.

Mann-Whitney U test results

The results obtained by the Man-Whitney U test, shown in table 10, indicate that there are no differences in the attitudes of the respondents at the final assessment in relation to gender regarding the statements I feel accepted and appreciated in the company of others, I regularly work on improving my skills and abilities, I believe that I have the potential to achieve my goals, I feel ready to face the challenges ahead, I get satisfaction from life and my achievements and I feel safe and confident in most situations. For the other 14 statements related to self-confidence and social communication, statistically significant differences were observed in relation to gender. Women reported higher scores than men, suggesting a somewhat greater self-perceived self-confidence and more positive social communication.

Table 10. Mann-Whitney U test - The difference in attitudes of respondents in relation to gender regarding claims about self-confidence and social communication on the final assessment

Tablica 10. Mann-Whitney U test - Razlika u stavovima ispitanika s obzirom na spol u vezi s tvrdnjama o samopouzdanju i socijalnoj komunikaciji na konačnoj procjeni

Statement	Mann-Whitney U	Wilcoxon W	Z	p
I believe in my inner strength and worth.	2214.000	5869.000	-2.439	**.015**
I feel accepted and appreciated in the company of others.	2291.500	5946.500	-1.945	.052
I work regularly to improve my skills and abilities.	2505.000	6160.000	-1.083	.279
I express my views and opinions with ease.	2248.500	5903.500	-2.120	**.034**
I believe I have the potential to achieve my goals.	2340.500	5995.500	-1.738	.082
I feel ready to face the challenges ahead.	2483.000	6138.000	-1.194	.232
I get satisfaction from life and my achievements.	242.000	6075.000	-1.451	.147
I accept myself completely, including my flaws.	2193.000	5848.000	-2.410	**.016**
I feel safe and confident in most situations.	2297.000	5952.000	-1.929	.054
I believe in myself and my abilities to handle whatever life throws at me.	2160.500	5815.500	-2.451	**.014**
I easily start a conversation with strangers.	2250.000	5907.000	-2.189	**.029**
I enjoy talking to different people.	2226.500	5881.500	-2.242	**.025**
I feel comfortable in social situations.	2194.000	5849.000	-2.345	**.019**
I express myself easily and rent out my ideas.	2125.000	5780.000	-2.650	**.008**

I fit in well with group activities.	2277.500	5932.500	-1.975	**.048**
I smile naturally and maintain a positive atmosphere.	2274.000	5929.000	-1.991	**.046**
I feel relaxed and safe in the company of others.	2231.000	5886.000	-2.152	**.031**
I regularly step out of my comfort zone in social situations.	2202.500	5857.500	-2.275	**.023**
I believe that I am capable of making deeper connections with other people.	2051.000	5706.000	-2.892	**.004**
I enjoy a variety of social interactions.	2198.500	5853.500	-2.299	**.022**

Source: Own research, 2023.

Kruskal–Wallis test results

According to the results of the Kruskal–Wallis test, shown in table 11, there are statistically significant differences in the respondents' attitudes in relation to age regarding the statements related to self-esteem and social communication at the final assessment ($p<.05$). In general, older respondents reported higher levels of self-confidence and more positive social communication compared to younger participants.

Table 11. Kruskal–Wallis test - The difference in attitudes of respondents in relation to age regarding claims about self-confidence and social communication on the final assessment

Tablica 11. Kruskal-Wallis test - Razlika u stavovima ispitanika s obzirom na dob u vezi s tvrdnjama o samopouzdanju i socijalnoj komunikaciji na konačnoj procjeni

Statement	Chi-square	df	p
I believe in my inner strength and worth.	56.528	2	.000
I feel accepted and appreciated in the company of others.	44.775	2	**.000**
I work regularly to improve my skills and abilities.	31.249	2	**.000**
I express my views and opinions with ease.	46.322	2	**.000**
I believe I have the potential to achieve my goals.	44.711	2	**.000**
I feel ready to face the challenges ahead.	28.934	2	.000
I get satisfaction from life and my achievements.	31.901	2	**.000**
I accept myself completely, including my flaws.	47.870	2	**.000**
I feel safe and confident in most situations.	51.515	2	**.000**

I believe in myself and my abilities to handle whatever life throws at me.	50.493	2	**.000**
I easily start a conversation with strangers.	48.720	2	.000
I enjoy talking to different people.	57.485	2	**.000**
I feel comfortable in social situations.	52.388	2	**.000**
I express myself easily and rent out my ideas.	48.241	2	**.000**
I fit in well with group activities.	47.994	2	**.000**
I smile naturally and maintain a positive atmosphere.	34.984	2	.000
I feel relaxed and safe in the company of others.	26.664	2	**.000**
I regularly step out of my comfort zone in social situations.	45.783	2	**.000**
I believe that I am capable of making deeper connections with other people.	40.294	2	**.000**
I enjoy a variety of social interactions.	38.634	2	**.000**

Source: Own research, 2023.

Final assessment compared to the initial assessment – Wilcoxon rank test results

The results obtained by the Wilcoxon rank test, shown in table 12, indicate statistically significant changes in the respondents' attitudes at the final assessment compared to the initial assessment for all observed variables related to self-confidence and social communication, at a significance level of p=.000. Overall, respondents gave higher ratings at the final assessment, suggesting an increase in self-perceived self-confidence and social communication.

Table 12. Wilcoxon's rank test related to the determinants related to the assessment of self-confidence and social communication

Tablica 12. Wilcoxon's test rangova povezan s odrednicama vezanim uz procjenu samopouzdanja i socijalne komunikacije

Odrednica	**Z**	**p**
I believe in my inner strength and worth.	-6.782	**.000**
I feel accepted and appreciated in the company of others.	-5.738	**.000**
I work regularly to improve my skills and abilities.	-7.341	**.000**

I express my views and opinions with ease.	-6.332	**.000**
I believe I have the potential to achieve my goals.	-5.657	**.000**
I feel ready to face the challenges ahead.	-6.451	**.000**
I get satisfaction from life and my achievements.	-7.518	.000
I accept myself completely, including my flaws.	-4.472	**.000**
I feel safe and confident in most situations.	-7.000	**.000**
I believe in myself and my abilities to handle whatever life throws at me.	-6.944	**.000**
I easily start a conversation with strangers.	-6.564	**.000**
I enjoy talking to different people.	-5.578	**.000**
I feel comfortable in social situations.	-6.105	**.000**
I express myself easily and rent out my ideas.	-6.667	**.000**
I fit in well with group activities.	-5.925	**.000**
I smile naturally and maintain a positive atmosphere.	-5.580	**.000**
I feel relaxed and safe in the company of others.	-5.771	**.000**
I regularly step out of my comfort zone in social situations.	-5.840	**.000**
I believe that I am capable of making deeper connections with other people.	-6.186	**.000**
I enjoy a variety of social interactions.	-6.019	**.000**

Source: Own research, 2023.

Disscussion

Aesthetic and corrective procedures can have a profound effect on an individual's self-confidence. When a person experiences changes in their body that they perceive as improvements, it can result in a significant increase in self-confidence. These improvements can promote a sense of self-worth and satisfaction with one's appearance, allowing a person to feel more confident and confident in social situations. Increased self-confidence can positively affect an individual's social communication. When a person feels better in their own skin, they are more inclined to initiate and participate in social interactions. Feeling satisfied with one's appearance can free an individual from the fear of judgment or non-acceptance and enable them to communicate more openly with others. Also, a transformation in appearance can change the way a person is perceived in society, which can make it easier to establish new friendships and maintain existing social ties.

This paper provides significant insights into the effects of aesthetic and corrective procedures on self-confidence and social communication. The results show that the

subjects expressed greater self-confidence and improvement in social interaction after the procedure. Statistically significant differences in perception between men and women were observed in most variables, while age differences also showed statistical significance. These findings emphasize the individualized effects of aesthetic and corrective procedures on self-confidence and social communication, which is important for tailoring treatments in aesthetic and plastic surgery. Also, the need for careful assessment of the context and individual characteristics of patients is emphasized in order to achieve optimal results and patient satisfaction.

All the hypotheses raised in this research were answered, and the results provide significant insights into the perception of self-confidence and social communication after aesthetic and corrective procedures. First, regarding the null hypothesis (Ho), the results point to confirmation that aesthetic and corrective interventions contribute to increasing self-confidence and improving the quality of social communication. This is supported by the statistically significant results obtained by the Wilcoxon rank test, which show that respondents gave higher ratings at the final assessment compared to the initial assessment for all observed variables. Second, hypothesis H1 suggests that there is a statistically significant difference in perceived results between men and women. The results of the Mann-Whitney U test confirm that hypothesis, showing statistically significant differences in the attitudes of respondents in relation to gender at the initial and final assessment for most variables, with female respondents generally giving higher ratings than male respondents. Third, hypothesis H2 implies that there are statistical differences in the perception of results among different ages. The results of the Kruskal–Wallis test confirm that hypothesis, showing statistically significant differences in the respondents' attitudes in relation to age at the initial and final assessment for most variables, with older respondents generally reporting higher self-confidence and more positive social communication than younger respondents. These results indicate that access to aesthetic and corrective procedures can result in individualized effects on self-confidence and social communication. This discovery has a potential benefit for adapting treatment strategies in the field of aesthetic and plastic surgery. Furthermore, the importance of taking into account the context and individual characteristics of patients when planning and performing these procedures is highlighted. This highlights the need for surgeons to carefully evaluate each patient to achieve optimal results and ensure patient satisfaction.

When compared to existing research, this research provides more detailed insights into the impact of aesthetic procedures on self-confidence and social communication, especially taking into account gender and age. While some previous work has investigated the general impact of aesthetic procedures, this research provides

differentiated insights that may be useful for personalizing approaches in clinical practice.

Based on the collected results, it is confirmed that aesthetic and corrective procedures have a significant impact on increasing the self-confidence and social communication of individuals, which coincides with the claims of other researchers (Rumsey and Harcourt, 2004; Mac Pherson, 2005; Sadick, 2008; Ericksen and Billick, 2012; Jones et al., 2020; Rothermel et al., 2020; Shah and Rieder, 2021; Weitzer and Fried 2021).

Research findings suggest that these interventions play a key role in transforming and improving self-confidence, confirming the relevance of the claims made by Margraf, Meyer and Lavallee (2013) and Golshani et al. (2016), The association between aesthetic changes and individual perception highlights the importance of treatment personalization, as highlighted by Golshani et al. (2016). Through this process, patients experience changes in the perception of their deficiencies, transforming them into positive aspects, as recognized by Margraf, Meyer, and Lavallee (2013). The active participation of patients in the selection of procedures also contributes to a sense of control over their own appearance, which is essential for increasing self-confidence, as suggested by Cohen et al. (2022). Furthermore, this process has profound psychological effects, reducing feelings of insecurity and susceptibility to negative social comparisons, as Elliot (2008) and Davis (2013) pointed out. The feeling of relief after achieving the desired results, together with emotional support, contributes to the creation of a positive emotional framework, as emphasized by Di Mattei et al. (2015) and Tokgöz and Carro (2023). These aspects are crucial for overcoming insecurity and creating a positive attitude towards oneself, which is reflected in the wider social context, according to Yıldız and Selimen (2015). Internal satisfaction with one's appearance also has profound implications for an individual's professional and social life, as supported by Elliot (2008) and Hamermesh (2011). A positive attitude towards one's appearance can promote productivity at work and build trust in interpersonal relationships, creating positive spirals in different aspects of life, as concluded by Kinnunen (2010) and Asimakopoulou, Zavrides and Askitis (2020). Finally, corrective and aesthetic procedures can encourage positive changes in an individual's lifestyle habits, which promotes a holistic approach to well-being, as pointed out by Margraf, Meyer and Lavallee (2013). This change in lifestyle can further strengthen self-confidence, creating lasting positive effects on an individual's overall well-being, as suggested by Mac Pherson (2005) and Hua (2013). Ultimately, the integration of these findings highlights the importance of a comprehensive approach to individual well-being, combining physical and psychological aspects to achieve a long-term positive impact on self-esteem and quality of life.Top of Form

Corrective and aesthetic interventions have a significant impact on social communication. Studies like the ones they conducted Eisenmann-Klein (2007), Edmonds (2010), Parker (2010), Yıldız and Selimen (2015), Heyes and Jones (2016), Najjaran Toussi and Shareh (2019), Kiani and Mardmor (2019), Bellino et al. (2011), Asimakopoulou, Zavrides and Askitis (2020), Borujeni et al. (2020), McKeown (2021), Skwirczyńska et al. (2022), Santos et al. (2023), and others emphasize different aspects of this influence. Satisfaction with one's own appearance after the procedure can increase an individual's self-confidence, which facilitates openness to new contacts and reduces social anxiety (Parker, 2010; Najjaran Toussi and Shareh, 2019; Kiani and Mardmor, 2019). Improved self-confidence can also improve professional relationships, encouraging better verbal and non-verbal communication and building mutual respect (Foustanos, Pantazi and Zavrides, 2007; Eisenmann-Klein, 2007; Santos et al., 2023). Also, aesthetic procedures can reduce stress in social situations, providing emotional stability and changing the individual's perception of social interactions (Borujeni et al., 2020; McKeown, 2021; Skwirczyńska et al., 2022). This reduction in stress can result in more authentic communication and deeper interpersonal connections (Bellino et al., 2011). Finally, increased self-confidence after aesthetic procedures can positively affect emotional relationships, creating a stable emotional environment, improved communication and intimacy between partners (Edmonds, 2010; Asimakopoulou, Zavrides and Askitis, 2020). All these aspects together contribute to the quality of social communication and emotional well-being of the individual.

Based on the results of the research, surgeons are recommended to personalize the treatment in order to achieve the maximum benefit for the patients. Each patient has unique needs and expectations, so it is important to adjust the procedure according to them. Also, it is important to keep in mind that there are differences in perception and results between men and women, as well as between different ages. Therefore, surgeons should take these differences into account when planning and performing procedures.

In addition, careful assessment of patients is essential. Surgeons should pay special attention to the context and individual characteristics of each patient in order to achieve optimal results and patient satisfaction. Communication with patients about their goals, expectations and possibilities is also of great importance. All these guidelines will enable surgeons to provide the best possible care to their patients and achieve positive effects of aesthetic and corrective procedures on self-confidence and social interaction.

The scientific contribution of this research lies in the fact that it contributes to the understanding of the connection between aesthetic and corrective procedures, se-

lf-confidence and social communication, which is important for the psychological well-being and quality of life of patients. By identifying factors that contribute to improved self-confidence and social interaction after the procedure, this research may provide guidance for the development of personalized approaches and support for patients seeking cosmetic procedures. In addition, research into demographic factors that influence perceptions of outcomes can inform tailored intervention strategies and improve patient outcomes.

Conclusion

Aesthetic and corrective procedures have a significant impact on individuals' self-confidence and social communication. Changes in appearance that patients perceive as improvements can enhance self-esteem, facilitate social interactions, and contribute to better emotional stability. Research findings indicate that these procedures can have individualized effects depending on demographic characteristics, but overall, they provide positive psychological and social outcomes. These findings highlight the importance of a personalized approach in aesthetic and plastic surgery and contribute to understanding the relationship between physical appearance, self-confidence, and the quality of social communication.

The study has several limitations that should be taken into account when interpreting the results. First, the sample of participants is not fully representative, as a larger proportion of respondents were female and of younger age, which may influence perceptions of self-confidence and social communication. This demographic imbalance limits the generalizability of the findings to the broader population, particularly to older individuals and men, who were underrepresented. Second, self-confidence and social communication are subjective categories whose perception may be influenced by individual experiences, personal beliefs, social norms, and context, all of which can contribute to variability in the results. Third, aesthetic and corrective procedures are complex and individually specific; therefore, the type of procedure, recovery duration, patient expectations, and the level of postoperative support can significantly influence outcomes, but these factors were not analyzed in detail in this study.

Based on these limitations, future research should include a broader and more diverse sample of participants to ensure better generalization of the results. It is also recommended to conduct longitudinal studies that follow participants over an extended period after the procedures, allowing for a more detailed assessment of the long-term effects on self-confidence and social communication. Including additional variables, such as the type of intervention, patients' expectations, recovery

duration, and the level of postoperative support, could provide more precise guidelines for practice and treatment personalization. In addition to quantitative methods, the use of qualitative approaches could enable a deeper understanding of patients' subjective experiences, emotional reactions, and changes in social interaction, thereby improving overall support and the outcomes of aesthetic and corrective interventions. Such an approach would provide a more comprehensive insight into the effects of aesthetic and corrective procedures, enhance understanding of differences among demographic groups, and contribute to the development of personalized interventions that maximize positive psychological and social outcomes for patients.

REFERENCES

Abbas, O. L. and Karadavut, U. (2017) Analysis of the factors affecting men's attitudes toward cosmetic surgery: body image, media exposure, social network use, masculine gender role stress and religious attitudes. *Aesthetic plastic surgery* 41(6), pp. 1454-1462. Available at: https://doi.org/10.1007/s00266-017-0882-3.

Adams, J. (2010) Motivational narratives and assessments of the body after cosmetic surgery. *Qualitative health research*, 20(6), pp. 755–767. Available at:: https://doi.org/10.1177/1049732310362984.

Al Ghadeer, H. A., AlAlwan, M. A., AlAmer, M. A., Alali, F. J., Alkhars, G. A., Alabdrabulrida, S. A. and Abbas, H. (2021) Impact of self-esteem and self-perceived body image on the acceptance of cosmetic surgery. *Cureus* 13(10). Available at: https://doi.org/10.7759/cureus.18825.

Aparicio-Martinez, P., Perea-Moreno, A. J., Martinez-Jimenez, M. P., Redel-Macías, M. D., Pagliari, C. and Vaquero-Abellan, M. (2019) Social media, thin-ideal, body dissatisfaction and disordered eating attitudes: An exploratory analysis. *International journal of environmental research and public health*, 16(21). https://doi.org/10.3390/ijerph16214177.

Arab, K., Barasain, O., Altaweel, A., Alkhayyal, J., Alshiha, L., Barasain, R. ... and Alshaalan, H. (2019) Influence of social media on the decision to undergo a cosmetic procedure. *Plastic and Reconstructive Surgery–Global Open*, 7(8). Available at: https://doi.org/10.1097/GOX.0000000000002333.

Asimakopoulou, E., Zavrides, H. and Askitis, T. (2019) The impact of aesthetic plastic surgery on body image, body satisfaction and self-esteem. *Acta chirurgiae plasticae*, 61(1-4), pp. 3-9.

Asimakopoulou, E, Zavrides, H. and Askitis, T. (2020) The correlation of aesthetic plastic surgery with sexual, social, and romantic life in Cyprus. *Plastic and*

Aesthetic Nursing, 40(2), pp. 100-105. Available at: https://doi.org/10.1097/PSN.0000000000000303.

Atiyeh, B. S., Rubeiz, M. T. and Hayek, S. N. (2020) Aesthetic/cosmetic surgery and ethical challenges. *Aesthetic plastic surgery*, 44, pp. 1364-1374.

Bellino, S., Fenocchio, M., Zizza, M., Rocca, G., Bogetti, P. and Bogetto, F. (2011) Quality of life of patients who undergo breast reconstruction after mastectomy: effects of personality characteristics. *Plastic and reconstructive surgery*, 127(1), pp. 10-17. Available at: https://doi.org/10.1097/PRS.0b013e3181f956c0.

Bonell, S., Barlow, F. K. and Griffiths, S. (2021). The cosmetic surgery paradox: Toward a contemporary understanding of cosmetic surgery popularisation and attitudes. *Body Image*, 38, pp. 230-240. Available at: https://doi.org/10.1016/j.bodyim.2021.04.010.

Borujeni, L. A., Pourmotabed, S., Abdoli, Z., Ghaderi, H., Mahmoodnia, L., Sedehi, M. and Hasanpour Dehkordi, A. (2020) A comparative analysis of patients' quality of life, body image and self-confidence before and after aesthetic rhinoplasty surgery. *Aesthetic Plastic Surgery*, 44, pp. 483-490. Available at: https://doi.org/10.1007/s00266-019-01559-3.

Cohen, J. L., Rivkin, A., Dayan, S., Shamban, A., Werschler, W. P., Teller, C. F. ... and Garcia, J. K. (2022). Multimodal facial aesthetic treatment on the appearance of aging, social confidence, and psychological well-being: HARMONY study. *Aesthetic Surgery Journal*, 42(2), pp. NP115-NP124. Available at: https://doi.org/10.1093/asj/sjab114.

Davis, K. (2013). *Reshaping the female body: The dilemma of cosmetic surgery.* London: Routledge.

Devgan, L., Singh, P., & Durairaj, K. (2019) Minimally invasive facial cosmetic procedures. *Otolaryngologic Clinics of North America*, 52(3), pp. 443-459. Available at: https://doi.org/10.1016/j.otc.2019.02.013.

Di Mattei, V. E., Bagliacca, E. P., Ambrosi, A., Lanfranchi, L., Preis, F. B. and Sarno, L. (2015). The impact of cosmetic plastic surgery on body image and psychological well-being: a preliminary study. *Int J Psychol Behav Anal*, 1(1), pp. 103-108. Available at: https://doi.org/10.15344/2455-3867/2015/103.

Didie, E. and Sarwer, D. (2003). Factors that influence the decision to undergo cosmetic breast augmentation surgery. *Journal of Women's Health*, 12(3), pp. 241-253. Available at: https://doi.org/10.1089/154099903321667582.

Dimbleby, R., and Burton, G. (2020) *More than words: An introduction to communication*. London: Routledge.

Dobosz, M., Rogowska, P., Sokołowska, E. and Szczerkowska-Dobosz, A. (2022) Motivations, demography, and clinical features of body dysmorphic disorder among pe-

ople seeking cosmetic treatments: a study of 199 patients. *Journal of Cosmetic Dermatology*, 21(10), pp. 4646-4650. Available at: https://doi.org/10.1111/jocd.14890.

Draelos, Z. D. (2021) The use of cosmetic products to improve self esteem & quality of life. *Essential Psychiatry for the Aesthetic Practitioner*, pp. 34-41. Available at: https://doi.org/10.1002/9781119680116.ch3.

Edmonds, A. (2010) *Pretty modern: beauty, sex, and plastic surgery in Brazil*. Durham: Duke University Press.

Eisenmann-Klein, M. (2007) The Impact of Self-Image and Self-Confidence in the Work Environment. *Aesthetic Plastic Surgery*, 31(5), pp. 443-444.

Eldaly, A. S. and Mashaly, S. M. (2021) The new dilemma of plastic surgery and social media: a systematic review. *European Journal of Plastic Surgery*, pp. 1-12. Available at: https://doi.org/10.1007/s00238-021-01891-5.

Elliott, A. (2008) *Making the cut: How cosmetic surgery is transforming our lives.* London: Reaktion Books.

Ericksen, W. L. and Billick, S. B. (2012) Psychiatric issues in cosmetic plastic surgery. *Psychiatric Quarterly*, 83, pp. 343-352. Available at: https://doi.org/10.1007/s11126-012-9204-8.

Farolch-Prats, L. and Nome-Chamorro, C. (2019) Facial contouring by using dermal fillers and botulinum toxin A: a practical approach. *Aesthetic Plastic Surgery*, 43, pp. 793-802. Available at: https://doi.org/10.1007/s00266-019-01361-1.

Fontdevila, J. and Marshall, A. (2019) Lipofilling in Aesthetic Surgery: Indications, Outcomes, and Complications. *Regenerative Medicine Procedures for Aesthetic Physicians*, pp. 109-124. Available at: https://doi.org/10.1007/978-3-030-15458-5_11.

Foustanos, A, Pantazi, L. and Zavrides, H. (2007) Representations in plastic surgery: the impact of self-image and self-confidence in the work environment. *Aesthetic plastic surgery*, 31, pp. 435-442. Available at: https://doi.org/10.1007/s00266-006-0070-3.

Gold, M. H., Andriessen, A., Goldberg, D. J., Grover, K. V., Hu, S., Lorenc, Z. P. ... and Vega, J. H. (2020) Pre-/postprocedure measures for minimally invasive, nonenergy aesthetic treatments: A survey. *Journal of cosmetic dermatology*, 19(7), pp. 1587-1592. Available at: https://doi.org/10.1111/jocd.13460.

Golshani, S., Mani, A., Toubaei, S., Farnia, V., Sepehry, A. A. and Alikhani, M. (2016) Personality and psychological aspects of cosmetic surgery. *Aesthetic plastic surgery*, 40, pp. 38-47.

Hamermesh, D. (2011) *Beauty pays: Why attractive people are more successful.* Princeton: Princeton University Press.

Harth, W. (2017) What is beauty? Manifest for an aesthetic character medicine. *Der Hautarzt*, 68, pp. 950-958. Available at: https://doi.org/10.1007/s00105-017-4051-z.

Hashemi, M., Sakhi, N., Ghazavi, H., Bolourinejad, P. and Kheirabadi, G. (2020) Effects of aesthetic rhinoplasty on quality of life, anxiety/depression, and self-esteem of the patients. *European Journal of Plastic Surgery*, 43, pp. 153-158. Available at: https://doi.org/10.1007/s00238-019-01582-2.

Heyes, C. J. and Jones, M. (2016) Cosmetic surgery in the age of gender, In Jones, M. (ed.) *Cosmetic Surgery*. London: Routledge, pp. 1-18.

Hua, W. (2013) *Buying beauty: Cosmetic surgery in China*. Hong Kong: Hong Kong University Press.

Honigman, R. J., Phillips, K. A. and Castle, D. J. (2004) A review of psychosocial outcomes for patients seeking cosmetic surgery. *Plastic and reconstructive surgery*, 113(4), pp. 1229-1237. Available at: https://doi.org/10.1097/01.PRS.0000110214.88868.CA

Jones, E. S., Gibson, J. A., Dobbs, T. D. and Whitaker, I. S. (2020) The psychological, social and educational impact of prominent ears: a systematic review. *Journal of Plastic, Reconstructive & Aesthetic Surgery*, 73(12), pp. 2111-2120. DOI: 10.1016/j.bjps.2020.05.075.

Kiani, M. K. and Mardmor, A. (2019) Evaluation of Body Dysmorphic Disorder and Social Anxiety between Women with Plastic Surgery with Women who do not; a Non-interventional Comparative Study. *Health Research*, 4(3), pp. 152-158.

Kinnunen, T. (2010) A second youth': pursuing happiness and respectability through cosmetic surgery in Finland. *Sociology of Health & Illness*, 32(2), pp. 258-271. Available at: https://doi.org/10.1111/j.1467-9566.2009.01215.x.

Kirpinar, I., Ayhan, M. S. and Guneren, E. (2021) Problematic patient. *Turkish Journal of Plastic Surgery*, *29*(Suppl 1), pp. S44-S52. Available at: https://doi.org/10.4103/tjps.tjps_81_20.

Koc, E. and Ayyildiz, A. Y. (2023) Well-being and aesthetic journeys: Motivations for cosmetic surgery tourism, In Uysal, M. and Sirgy, J. (eds.) *Handbook of Tourism and Quality-of-Life Research II: Enhancing the Lives of Tourists, Residents of Host Communities and Service Providers*. Cham: Springer International Publishing, pp. 197-210.

Laughter, M. R., Anderson, J. B., Maymone, M. B. and Kroumpouzos, G. (2023) Psychology of aesthetics: Beauty, social media, and body dysmorphic disorder. *Clinics in Dermatology*, 41(1), pp. 28-32. Available at: https://doi.org/10.1016/j.clindermatol.2023.03.002.

Mac Pherson, S. (2005) Self-esteem and cosmetic enhancement. *Plastic and Aesthetic Nursing*, 25(1), pp. 5-20. Available at: https://doi.org/10.1097/00006527-200501000-00003.

Mangialardi, M. L., Ozil, C. and Lepage, C. (2021) One-stage mastopexy–lipofilling in cosmetic breast surgery: a prospective study. *Aesthetic Plastic Surgery*, 45(5), pp. 1975-1985. Available at: https://doi.org/10.1007/s00266-021-02327-y.

Marco, K., Andrea, B., Andrea, R. and Valeriano, V. (2022) Aesthetic Plastic Surgery, In Maruccia, M. and Giudice, G. (eds.) *Textbook of Plastic and Reconstructive Surgery: Basic Principles and New Perspectives*. Berlin: Springer Nature, pp. 509-520.

Margraf, J., Meyer, A. H. and Lavallee, K. L. (2013) Well-being from the knife? Psychological effects of aesthetic surgery. *Clinical Psychological Science*, 1(3), pp. 239-252. Available at: https://doi.org/10.1177/2167702612471660.

McKeown, D. J. (2021) Impact of minimally invasive aesthetic procedures on the psychological and social dimensions of health. *Plastic and Reconstructive Surgery–Global Open*, 9(4). Available at: https://doi.org/10.1097/GOX.0000000000003578.

Mojs, E. (2019) Difficulties of being young, reflections on antiaging. *Journal of Face Aesthetics*, 2(1), pp. 9-20. Available at: https://doi.org/10.20883/jofa.6.

Muchemi, F., Ajiboye, F. T. and Ferneini, E. M. (2023) Minimally Invasive Facial Cosmetic Surgery, In Niekrash, C. E., Ferneini, E. M. and Goupil, M. T. (eds.) *Dental Science for the Medical Professional: An Evidence-Based Approach*. Cham: Springer International Publishing, pp. 409-414.

Najjaran Toussi, H. and Shareh, H. (2019) Changes in the indices of body image concern, sexual self-esteem and sexual body image in females undergoing cosmetic rhinoplasty: a single-group trial. *Aesthetic plastic surgery*, 43, pp. 771-779. Available at: https://doi.org/10.1007/s00266-019-01336-2.

Nisreen Mobayed, B. S., Julie, K. and Jared Jagdeo, M. D. (2020) Minimally invasive facial cosmetic procedures for the millennial aesthetic patient. *J Drug Dermatol*, 19(1), pp. 100-103. Available at: https://doi.org/10.36849/JDD.2020.4641.

Nguyen, C., Nicolai, E. S., He, J. J., Roshchupkin, G. V. and Corten, E. M. (2022) 3D surface imaging technology for objective automated assessment of facial interventions: A systematic review. *Journal of Plastic, Reconstructive & Aesthetic Surgery*, 75(11), pp. 4264-4272. Available at: https://doi.org/10.1016/j.bjps.2022.06.086.

Őry, F., Láng, A. and Meskó, N. (2023) Acceptance of cosmetic surgery in adolescents: The effects of caregiver eating messages and objectified body consciousness. *Current Psychology*, 42(18), pp. 15838-15846. Available at: https://doi.org/10.1007/s12144-022-02863-z.

Pallant, J. (2017) *SPSS – priručnik za preživljavanje*. Beograd: Mikro knjiga.

Paoli, B. and Procacci, M. (2019) Motivation and expectations of aesthetic patients, *Minerva Psichiatrica*, 60(4), pp. 180-190. Available at: https://doi.org/10.23736/S0391-1772.19.02035-1.

Papadopulos, N. A., Meier, A. C., Henrich, G., Herschbach, P., Kovacs, L., Machens, H. G. and Klöppel, M. (2019) Aesthetic abdominoplasty has a positive impact on quality of life prospectively. *Journal of Plastic, Reconstructive & Aesthetic Surgery*, 72(5), pp. 813-820. Available at: https://doi.org/10.1016/j.bjps.2018.12.020.

Papadopulos, N. A., Liebmann, J., Kloeppel, M., Henrich, G., Machens, H. G., Staudenmaier, R. and Niehaus, R. (2021) Quality of life after rhinoplasty: a prospective study. *Facial Plastic Surgery*, 37(05), pp. 639-645. Available at: https://doi.org/10.1055/s-0041-1725174.

Parker, R. (2010) *Women, doctors and cosmetic surgery: Negotiating the 'normal' body*. London: Springer.

Parsa, K. M., Prasad, N., Clark, C. M., Wang, H. and Reilly, M. J. (2021) Digital appearance manipulation increases consideration of cosmetic surgery: a prospective cohort study. *Facial Plastic Surgery & Aesthetic Medicine*, 23(1), pp. 54-58. Available at: https://doi.org/10.1089/fpsam.2020.0156.

Pearlman, R. L., Wilkerson, A. H., Cobb, E. K., Morrissette, S., Lawson, F. G., Mockbee, C. S. ... and Nahar, V. K. (2022) Factors associated with likelihood to undergo cosmetic surgical procedures among young adults in the United States: a narrative review. *Clinical, cosmetic and investigational dermatology*, pp. 859-877. Available at: https://doi.org/10.2147/CCID.S358573.

Popov, S. (2019) When is unconditional self-acceptance a better predictor of mental health than self-esteem? *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 37, pp. 251-261. Available at: https://doi.org/10.1007/s10942-018-0310-x.

Radman, M. and Pourhoseinali, L. (2022). Effect of rhinoplasty on changing body images in candidates for surgery. *Journal of Family Medicine and Primary Care*, 11(9), pp. 5535-5539. Available at: https://doi.org/10.4103/jfmpc.jfmpc_2116_21

Romero-Otero, J., Manfredi, C., Ralph, D., Osmonov, D., Verze, P., Castiglione, F., ... and García-Gómez, B. (2021) Non-invasive and surgical penile enhancement interventions for aesthetic or therapeutic purposes: A systematic review. *BJU international*, 127(3), pp. 269-291. Available at: https://doi.org/10.1111/bju.15145.

Rothermel, A., Loloi, J., Long Jr, R. E. and Samson, T. (2020) Patient-centered satisfaction after secondary correction of the cleft lip and nasal defect. *The Cleft Palate-Craniofacial Journal*, 57(7), pp. 895-899. Available at: https://doi.org/10.1177/10556656199011.

Rumsey, N. and Harcourt, D. (2004) Body image and disfigurement: issues and interventions. *Body image*, 1(1), p. 83-97. Available at: https://doi.org/10.1016/S1740-1445(03)00005-6.

Sadick, N. S. (2008) The impact of cosmetic interventions on quality of life. *Dermatology Online Journal*, 14(8).

Sampthirao, P. (2016) Self-concept and interpersonal communication. *The International Journal of Indian Psychology*, 3(3), pp. 177-189. Available at: https://doi.org/10.25215/0303.115.

Santos, G. R, Costa de-Araujo, D., Vasconcelos, C., Afonso Chagas, R. Goncalves Lopes, G., Setton, L., Alves Costa, R. and Pimentel, D. (2023) Impact of aesthetic mammoplasty on the self-esteem of women from a northeastern capital. *Revista Brasileira de Cirurgia Plástica*, 34, pp. 58-64. Available at: https://doi.org/10.5935/2177-1235.2019RBCP0009-EN.

Sarwer, D. B., Wadden, T. A., Pertschuk, M. J. and Whitaker, L. A. (1998) The psychology of cosmetic surgery: A review and reconceptualization. *Clinical psychology review*, 18(1), pp. 1-22. Available at: https://doi.org/10.1016/S0272-7358(97)00047-0.

Sarwer, D. (2019) Body image, cosmetic surgery, and minimally invasive treatments. *Body image*, 31, pp. 302-308. Available at: https://doi.org/10.1016/j.bodyim.2019.01.009.

Shah, P. and Rieder, E. A. (2021) Aesthetic Interventions and the Perception of Others: Observer Reported Outcomes. *Essential Psychiatry for the Aesthetic Practitioner*, pp. 115-124. Available at: https://doi.org/10.1002/9781119680116.ch10.

Sharaf, B., Leon, D. E., Wagner, L., Morris, J. M. and Salinas, C. A. (2022) Advances in Virtual Surgical Planning and Three-Dimensional Printing in Facial Reconstruction and Aesthetic Surgery: Virtual Planning and 3D Printing in the Management of Acute Orbital Fractures and Post-Traumatic Deformities. *Seminars in Plastic Surgery*, 36(3), pp. 149-157. Available at: https://doi.org/10.1055/s-0042-1754387.

Skwirczyńska, E., Piotrowiak, M., Ostrowski, M., Wróblewski, O., Tejchman, K., Kwiatkowski, S. and Cymbaluk-Płoska, A. (2022) Welfare and self-assessment in patients after aesthetic and reconstructive treatments. *International Journal of Environmental Research and Public Health*, 19(18). Available at: https://doi.org/10.3390/ijerph191811238.

Smith, E. R. and Collins, E. C. (2009) Contextualizing person perception: distributed social cognition. *Psychological review*, 116(2), pp. 343-364. Available at: https://psycnet.apa.org/doi/10.1037/a0015072.

Tokgöz, E. and Carro, M. A. (2023) Cosmetic and reconstructive facial plastic surgery related simulation and optimization efforts, In Tokgöz, E. and Carro, M. A. (eds.) *Cosmetic and reconstructive facial plastic surgery: A review of medical and biomedical engineering and science concepts*. Cham: Springer Nature Switzerland, pp. 231-256.

Vendemia, M. A. and DeAndrea, D. C. (2021) The effects of engaging in digital photo modifications and receiving favorable comments on women's selfies shared on social media, *Body Image*, 37, pp. 74-83. Available at: https://doi.org/10.1016/j.bodyim.2021.01.011.

Vles, M. D., Terng, N. C. O., Zijlstra, K., Mureau, M. A. M. and Corten, E. M. L. (2020) Virtual and augmented reality for preoperative planning in plastic surgical procedures: a systematic review. *Journal of Plastic, Reconstructive & Aesthetic Surgery*, 73(11), pp. 1951-1959. Available at: https://doi.org/10.1016/j.bjps.2020.05.081.

Von Soest, T., Kvalem, I. L., Roald, H. E. and Skolleborg, K. C. (2009) The effects of cosmetic surgery on body image, self-esteem, and psychological problems. *Journal of plastic, reconstructive & Aesthetic Surgery*, 62(10), pp. 1238-1244. Available at: https://doi.org/10.1016/j.bjps.2007.12.093.

Walker, C. E., Krumhuber, E. G., Dayan, S., and Furnham, A. (2021) Effects of social media use on desire for cosmetic surgery among young women. *Current psychology*, 40, pp. 3355-3364. Available at: https://psycnet.apa.org/doi/10.1007/s12144-019-00282-1.

Weitzer, D., & Fried, R. G. (2021) Aesthetic Interventions and the Perception of the Self: Quality of Life and Patient Reported Outcomes, In Rieder, E. and Fried, R. G. (eds.) *Essential Psychiatry for the Aesthetic Practitioner*, pp. 105-114. Available at: https://doi.org/10.1002/9781119680116.ch9.

Will, E. M., Will, B. M., Will, M. J. and Koch, A. (2022) Minimally Invasive Cosmetic Procedures, In Elie M. Ferneini, E. M., Goupil, M. T. and Halepas, S. (eds.) *The History of Maxillofacial Surgery: An Evidence-Based Journey*. Cham: Springer International Publishing, pp. 425-441.

Yamin, F., McAuliffe, P. B. and Vasilakis, V. (2021) Aesthetic surgical enhancement of the upper lip: a comprehensive literature review. *Aesthetic Plastic Surgery*, 45, pp. 173-180. Available at: https://doi.org/10.1007/s00266-020-01871-3.

Yıldız, T. and Selimen, D. (2015) The impact of facial aesthetic and reconstructive surgeries on patients' quality of life. *Indian Journal of Surgery*, 77, pp. 831-836. Available at: https://doi.org/10.1007/s12262-013-1024-z.

Yin, Z., Wang, D., Ma, Y., Hao, S., Ren, H., Zhang, T. ... and Fan, J. (2016) Self-esteem, self-efficacy, and appearance assessment of young female patients undergoing facial cosmetic surgery: a comparative study of the Chinese population. *JAMA facial plastic surgery*, 18(1), pp. 20-26. Available at: https://doi.org/10.1001/jamafacial.2015.1381.

Zgrabljić Rotar, N. (2023) *Uvod u medije i medijsku pismenost*. Zagreb: Leykam international.

Zhang, E. (2023) I don't just want to look female; I want to be beautiful: theorizing passing as labor in the transition vlogs of Gigi Gorgeous and Natalie Wynn. *Feminist Media Studies*, 23(4), pp. 1376-1391. Available at: https://doi.org/10.1080/14680777.2022.2041687.

Medij. istraž. (god. 31, br. 2) 2025. (35-72)

Estetske i korektivne intervencije: promjene u samopouzdanju i socijalnoj komunikaciji

Anthony Ban
Branka Ličanin
Božidar Veljković

SAŽETAK

Estetski i korektivni zahvati značajno poboljšavaju samopouzdanje i socijalnu komunikaciju pojedinaca, pozitivno transformirajući njihov život i zadovoljstvo. Ove intervencije pružaju emocionalnu podršku i poboljšavaju samopercepciju, doprinoseći sigurnosti i interakciji s okolinom. Cilj ovog istraživanja bio je ispitati razlike u razini samopouzdanja i socijalne komunikacije prije i nakon estetskih i korektivnih zahvata, uzimajući u obzir spol i dob ispitanika. Istraživanje je provedeno na uzorku od 150 pacijenata u Puli i Rovinju (Hrvatska) koji su prošli različite estetske i korektivne tretmane. Primijenjena je Skala procjene samopouzdanja i socijalne komunikacije, a podaci su analizirani pomoću programa IBM SPSS Statistics (version 23). Rezultati Wilcoxon testa pokazali su statistički značajna povećanja samopouzdanja i kvalitete socijalne komunikacije nakon zahvata ($p < .001$) u svim promatranim varijablama. Analiza prema spolu ukazala je na više razine samopouzdanja i socijalne otvorenosti kod žena u usporedbi s muškarcima, dok su stariji ispitanici pokazali stabilniji porast emocionalne sigurnosti i samoprihvaćanja od mlađih sudionika. Mann–Whitney U test i Kruskal–Wallis test potvrdili su statistički značajne razlike u percepciji rezultata s obzirom na spol i dob ($p < .05$). Dobiveni nalazi upućuju na to da estetski i korektivni zahvati ne djeluju samo na fizički izgled, već i na psihološko funkcioniranje i socijalne odnose pojedinaca. Uočeni učinci variraju prema demografskim obilježjima, što naglašava potrebu za individualiziranim pristupom u planiranju i provođenju estetskih tretmana. Zaključno, istraživanje potvrđuje da estetski i korektivni zahvati mogu značajno unaprijediti samopouzdanje i socijalnu komunikaciju, pri čemu spol i dob imaju moderirajuću ulogu. Znanstveni doprinos ovog istraživanja je bolje razumijevanje veze između estetskih zahvata, samopouzdanja i socijalne komunikacije, što je važno za psihološko blagostanje pacijenata. Istraživanje može pomoći u razvoju personaliziranih pristupa i strategija koje poboljšavaju ishode za pacijente.

Ključne riječi: estetski zahvati, korektivni zahvati, kirurgija, samopouzdanje, socijalna komunikacija