

Impact of Mask-Wearing on Public Attitudes, Perceptions, and Interest in Rhinoplasty During the COVID-19 Pandemic

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Background: This study aimed to investigate the influence of mask use on attitudes, perceptions, and interests in rhinoplasty during the COVID-19 pandemic in Saudi Arabia. Our objective is to identify the factors influencing public attitudes, perceptions, and interest in undergoing rhinoplasty during the COVID-19 pandemic, as well as the elements that altered individuals' decisions regarding the procedure.

Methods: Epi Info software was used to calculate sample size, and a pilot study confirmed the feasibility of the research. Data analysis incorporated both descriptive and inferential statistics, with results illustrated in tables and graphs. Participant privacy was ensured throughout.

Results: Most participants were women (81.7%), 18–24 years, single, and from the eastern region. Only 16.3% believed rhinoplasty is exclusive to women, 15.1% considered it solely cosmetic, and 50.3% thought it should be restricted to adults. Among 25 participants (3.9%) who had rhinoplasty, 64% made the decision independently, whereas acquaintances influenced the rest. Additionally, 62.8% disagreed with the notion that rhinoplasty is unnecessary while wearing masks, indicating a preference for the procedure even with mask use. A χ^2 test revealed significant associations between rhinoplasty preference during mask usage and sex ($P = 0.019$), gender exclusivity ($P < 0.001$), cosmetic purpose ($P = 0.033$), cultural discouragement ($P < 0.001$), and surgeon type ($P < 0.001$).

Conclusions: Mask-wearing during the COVID-19 pandemic led to an increased interest in rhinoplasty. However, further research is needed to determine if this interest in rhinoplasty translates into an increase in surgical procedures being performed. (*Plast Reconstr Surg Glob Open* 2025;13:e6587; doi: [10.1097/GOX.0000000000006587](https://doi.org/10.1097/GOX.0000000000006587); Published online 14 March 2025.)

INTRODUCTION

Cosmetic surgery has grown in popularity worldwide recently.¹ According to the American Society of Plastic Surgeons, the number of cosmetic treatments performed worldwide has increased by 169% in the last 20 years (from

2000 to 2019), with the majority of these procedures being minimally invasive.² The media have had a significant impact on the impression of cosmetic procedures and their impact on self-satisfaction, in which the outcomes of cosmetic procedures are displayed in a glorified manner, changing society's attitude toward cosmetic surgery.³

Coronavirus disease 2019 (COVID-19) swiftly became one of the most serious disease outbreaks in recent history. The World Health Organization classified the disease as a worldwide pandemic on March 11, 2020. On March 2, 2020, the first instance of COVID-19 infection in Saudi Arabia was reported. To restrict the spread of COVID-19 in Saudi Arabia, the Ministry of Health immediately and proactively developed incremental but severe measures.⁴

Although the world has changed since the COVID-19 pandemic, it is unclear whether these changes have influenced people's judgments and attitudes about aesthetic surgery.⁵ Mask-wearing, for example, has been normalized in our society. However, the impact of masking our faces in our social interactions and our ability to perceive and

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interpret one another should not be underestimated.⁶ Thus, our study aimed to explore the relationship between mask-wearing and patients' attitudes, perceptions, and interest in undergoing rhinoplasty during the COVID-19 pandemic.

OBJECTIVES OF THE STUDY

Aim of the Study

Upon reviewing the literature on cosmetic surgery during COVID-19, we might be able to determine the influence of mask-wearing on the decision to undergo rhinoplasty surgery. Therefore, it would be possible to identify whether mask-wearing and other factors have an influence on an individual's decision to have rhinoplasty. Identifying such factors could help plastic surgeons address such expectations in patient selection and focus educational campaigns and materials to help control these influencing factors on individual decisions. Eventually, we hope to understand the thoughts of an individual's choice towards their actual need for aesthetic facial surgery.

Specific Objectives

Our main goal was to understand the influencing factors on public attitude, perception, and interest in having rhinoplasty during the COVID-19 pandemic; in addition, to identify the factors that altered decision-making among individuals during the COVID-19 pandemic; and finally, to advocate for an educational campaign to control these factors.

METHODOLOGY

Study Design

This descriptive correlational cross-sectional study was conducted between August 2022 and December 2022 in Saudi Arabia. The study targeted the general Saudi population, which is between the ages of 18 and 65 years and has good general health. Participants were selected using convenience sampling. Participants were excluded if they were younger than 18 years, older than 65 years, had poor general health, were currently positive for COVID-19, or had body dysmorphic features. Responses of the participants were collected using a Google survey in which questions used a Likert scale to assess their attitude. The study design is a cross-sectional correlational study to explore the relationship between mask-wearing and patients' attitudes, perceptions, and interest in having rhinoplasty during the COVID-19 pandemic. The sample size was calculated using Epi Info software with a confidence level of 95% and a statistical power of 80%.

The questionnaire was developed after reviewing the relevant literature focusing on exploring the relationship between mask-wearing and individuals' attitudes, perceptions, and interest in undergoing rhinoplasty during the COVID-19 pandemic. This process was conducted by 2 independent expert investigators, and any disagreements were resolved through discussion. Then, the questionnaire was written in both Arabic and English. The survey

Takeaways

Question: How has mask-wearing influenced the general population on having rhinoplasty?

Findings: Mask-wearing during the coronavirus disease 2019 pandemic led to an increased interest in rhinoplasty.

Meaning: Individuals who wear masks are more conscious of their appearance and are motivated to improve it. In addition, the increasing demand for rhinoplasty procedures reflects the public's desire to boost their self-confidence and physical attractiveness.

consisted of 4 sections. The first section is concerned with sociodemographics such as age, sex, residence, occupation, social status, and education. The second, third, and fourth sections included items about perception (6 items), motivational factors (10 items), COVID-19, and the influence of mask-wearing on rhinoplasty decisions (5 items) using a Likert scale. University faculty members checked and validated the survey. After that, a bilingual expert translated and checked the accuracy of the translation of the questionnaire in the Arabic language. Next, a pilot study with a sample size of 30 was conducted to assess the feasibility of the full-scale project. Finally, the Google Form application was used to create a link for the survey to be sent to the population through messaging apps. Data collectors from all over the country helped in distributing the questionnaire to a large community.

Data Analysis

Statistical analysis was performed using RStudio (version 4.3.1.). We expressed categorical variables as frequencies and percentages. We used a Pearson χ^2 test or a Fisher exact test to evaluate the differences in participants' perceptions regarding the necessity of rhinoplasty while wearing a face mask in terms of different sociodemographic characteristics, perceptions regarding the procedure, and influential factors for the choice of the procedure. Statistical significance was set at a *P* value less than 0.05.

Ethical Consideration

Before conducting the study, the institutional review board ensured that ethical boundaries had not been breached. The study was approved by the institutional review board under study number NRJ23J/192/07. In addition, the authors made sure that individuals' rights to autonomy, confidentiality, and privacy were always maintained without any compromise throughout the entirety of the study.

Budget

This study was not funded.

RESULTS/ANALYSIS

Sociodemographic Characteristics

The records of 648 participants out of 1264 with a response rate of 51.2% were analyzed in the current study.

The majority of respondents were between 18 and 24 years of age (41.2%) and were predominantly women (81.8%). Regarding marital status, nearly half of the participants

Table 1. Sociodemographic Characteristics

Characteristic	N = 648
Age, y	
18–24	267 (41.2)
25–30	124 (19.1)
31–40	143 (22.1)
41–50	92 (14.2)
51–65	22 (3.4)
Sex	
Male	118 (18.2)
Female	530 (81.8)
Marital status	
Single	320 (49.4)
Married	307 (47.4)
Divorced	15 (2.3)
Widowed	6 (0.9)
Educational level	
Primary	3 (0.5)
Secondary	24 (3.7)
Intermediate	170 (26.2)
University	426 (65.7)
Postgraduate degree	25 (3.9)
Dominant hand	
Right	573 (88.4)
Left	54 (8.3)
Both right and left	21 (3.2)
Income (SAR)	
<10,000	454 (70.1)
10,000–20,000	137 (21.1)
20,000–30,000	30 (4.6)
>30,000	27 (4.2)
Region of residence	
Eastern	325 (50.2)
Western	142 (21.9)
Northern	35 (5.4)
Southern	44 (6.8)
Central	102 (15.7)
Residence	
Urban area	541 (83.5)
Rural area	107 (16.5)

Data are presented as n (%).
SAR, Saudi Arabian riyal.

were single (49.4%). In terms of educational attainment, the highest proportion had a university degree (65.7%). Moreover, most participants reported an income of less than 10,000 Saudi Arabian riyals (70.1%). In terms of region of residence, the eastern region had the highest representation (50.2%), and the majority resided in the urban area (83.5%, [Table 1](#)).

Perceptions About Rhinoplasty

A significant portion believed that rhinoplasty is not exclusively suitable for women (16.3% strongly agree/agree), nor is it solely for cosmetic purposes (15.1% strongly agree/agree). Interestingly, a substantial number also disagreed with the notion that rhinoplasty is solely for individuals older than 18 years (50.3% strongly agree/agree). Moreover, a considerable proportion acknowledged religious and cultural factors influencing the decision not to undergo rhinoplasty (45.5% strongly agree/agree for religious purposes and 32.5% strongly agree/agree for cultural purposes). Surprisingly, a majority agreed with the notion that only plastic surgeons perform rhinoplasty (53% strongly agree/agree, [Table 2](#)).

Motivational Factors to Undergo Rhinoplasty

A total of 25 respondents had ever undergone a rhinoplasty procedure, representing 3.9% of the sample. About one-half of those who underwent the procedure made their decision on their own (52.0%) and not after observing previous patients (48.0%). Only 9 patients (36.0%) indicated that the decision to undergo rhinoplasty procedures was made by external influences. The most common external influences were friends/husbands/wives (33.3%, [Table 3](#)).

Out of the overall population under study, a considerable proportion of participants identified low self-esteem (63.1%) and past experiences of teasing and bullying (72.7%) as influential in their decision to undergo rhinoplasty. Additionally, a substantial majority attributed the choice to famous social media figures (67.4%) and certain celebrities (71.6%). Interestingly, peer pressure was also deemed influential by a considerable number of respondents (46.6%). Moreover, a significant percentage considered romantic relationships (35.5%) to have an impact on their choice ([Table 3](#)).

Table 2. Perceptions About Rhinoplasty

Characteristic	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Do you believe rhinoplasty is only suitable for women?	342 (52.8)	64 (9.9)	136 (21.0)	43 (6.6)	63 (9.7)
Do you believe rhinoplasty is only suitable for cosmetic purposes?	389 (60.0)	70 (10.8)	91 (14.0)	31 (4.8)	67 (10.3)
Do you believe rhinoplasty is only suitable for individuals older than 18 y?	165 (25.5)	49 (7.6)	108 (16.7)	64 (9.9)	262 (40.4)
Do you believe that many people avoid undergoing rhinoplasty due to religious purposes?	128 (19.8)	60 (9.3)	165 (25.5)	90 (13.9)	205 (31.6)
Do you believe that many people avoid undergoing rhinoplasty due to cultural purposes?	134 (20.7)	97 (15.0)	206 (31.8)	91 (14.0)	120 (18.5)
Do you believe rhinoplasty is only done by plastic surgeons?	120 (18.5)	68 (10.5)	116 (17.9)	67 (10.3)	277 (42.7)

Data are presented as n (%).

COVID-19 and the Influence of Wearing a Mask on Rhinoplasty Decisions

A substantial portion disagreed with the statement indicating that it would not be necessary to undergo rhinoplasty while masks cover the nose (62.8% strongly disagree/disagree), thus indicating that most participants would prefer to undergo rhinoplasty while wearing a mask. Additionally, a small proportion expressed anxiety about contracting COVID-19 post-rhinoplasty (13.3% strongly agree/agree). Interestingly, respondents showed mixed feelings regarding the era of mask-wearing and its potential to conceal nasal swelling and bruises (39.2% strongly agree/agree). Moreover, concerns about difficulties in nose breathing with masks post-rhinoplasty (43.8% strongly agree/agree) and the potential impact of continuous mask-wearing on nose shape (33% strongly agree/agree) were prevalent (Table 4).

The Differences in Participants' Perceptions Regarding Undergoing Rhinoplasty While Wearing a Face Mask

Regarding participants' perceptions of the necessity of undergoing rhinoplasty while wearing a face mask, sex showed a significant association ($P = 0.019$). A higher proportion of women (64.9%) expressed the necessity of rhinoplasty compared with men (53.4%, Table 5). Significant associations were also found with beliefs about whether rhinoplasty is only suitable for women ($P < 0.001$), for cosmetic purposes ($P = 0.033$), not undergone due to cultural purposes ($P < 0.001$), and only done by plastic surgeons ($P < 0.001$, Table 6). Significant associations were evident with beliefs about whether famous social media figures ($P = 0.031$), low self-esteem ($P = 0.002$), teasing and bullying in the past ($P = 0.002$), certain celebrities ($P = 0.006$), and romantic relationships ($P = 0.004$) have an influence on the decision to undergo rhinoplasty (Table 7).

DISCUSSION

When a new cluster of patients with pneumonia emerged in Wuhan, China, in December 2019, a novel coronavirus (COVID-19), termed the severe acute respiratory syndrome coronavirus 2, was first observed. A highly contagious, severe acute respiratory syndrome coronavirus 2 caused the illness that led to a worldwide pandemic, declared on March 11, 2020.⁷ The COVID-19 pandemic has influenced humanity in countless ways. The measures taken by the Ministry of Health in Saudi Arabia to prevent and reduce the spread of the infection, such as social isolation; voluntary house quarantine; the suspension of Umrah (Mecca pilgrimage); and the closure of schools, mosques, and airports for both national and international destinations, were among the key initiatives.⁸ Other initiatives included enforcing curfews that lasted up to 24 hours and initiating massive public awareness campaigns via television commercials, social media platforms, and phone SMS messaging to underline the importance of these measures and the severity of the outbreak.⁹

In addition, the global spread of COVID-19 has resulted in a sharp reduction in the performance of

Table 3. Motivational Factors

Characteristic	n (%)
Was the decision to have rhinoplasty made on your own initiative?*	
No	8 (32.0)
Not sure	4 (16.0)
Yes	13 (52.0)
Was the decision to have rhinoplasty made after observing a previous patient?*	
No	12 (48.0)
Not sure	7 (28.0)
Yes	6 (24.0)
Was the decision to have rhinoplasty made by external influences?*	
No	16 (64.0)
Yes	9 (36.0)
If yes, please specify the external influences†	
Parents	2 (22.2)
Friend/husband/wife	3 (33.3)
Milieu	1 (11.1)
Social media influencers	2 (22.2)
None	1 (11.1)
Do you believe peer pressure has an influence on the choice of having rhinoplasty?	
No	142 (21.9)
Not sure	204 (31.5)
Yes	302 (46.6)
Do you believe famous social media figures have an influence on the choice of having rhinoplasty?	
No	54 (8.3)
Not sure	157 (24.2)
Yes	437 (67.4)
Do you believe low self-esteem has an influence in the choice of having rhinoplasty?	
No	82 (12.7)
Not sure	157 (24.2)
Yes	409 (63.1)
Do you believe teasing and bullying in the past has an influence on the choice of having rhinoplasty?	
No	39 (6.0)
Not sure	138 (21.3)
Yes	471 (72.7)
Do you believe certain celebrities have an influence on the choice of having rhinoplasty?	
No	42 (6.5)
Not sure	142 (21.9)
Yes	464 (71.6)
Do you believe romantic relationships have an influence on the choice of having rhinoplasty?	
No	208 (32.1)
Not sure	210 (32.4)
Yes	230 (35.5)

The responses are based on 648 records.

*The responses are based on 25 records of participants who had ever undergone a rhinoplasty procedure.

†The responses are based on 9 records of participants who made the decision to have rhinoplasty based on external influences.

elective nonessential procedures across specialties in most impacted nations, resulting in a heavy economic burden that has affected privately owned clinics and hospitals.¹⁰ All elective clinics and procedures, as well as cosmetic surgical procedures in public and private hospitals and day surgery centers, were suspended on

Table 4. COVID-19 and the Influences of Wearing Mask on Rhinoplasty Decision

Characteristic	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Do you believe that it would not be necessary to do rhinoplasty while the face mask is covering the nose?	306 (47.2)	101 (15.6)	153 (23.6)	32 (4.9)	56 (8.6)
Would you be more anxious to contract the COVID-19 virus after undergoing a rhinoplasty?	349 (53.9)	71 (11.0)	142 (21.9)	35 (5.4)	51 (7.9)
Would you prefer to undergo a rhinoplasty while being in the era of wearing a mask because it will conceal the nasal swelling and bruises?	168 (25.9)	60 (9.3)	166 (25.6)	89 (13.7)	165 (25.5)
Are you afraid of having a difficult time nose breathing with the mask on after undergoing a rhinoplasty?	119 (18.4)	54 (8.3)	191 (29.5)	92 (14.2)	192 (29.6)
Are you afraid that continuous mask-wearing would affect the nose shape after undergoing a rhinoplasty?	187 (28.9)	61 (9.4)	186 (28.7)	59 (9.1)	155 (23.9)

Data are presented as n (%).

March 16, 2020. Only emergency and life-saving surgical procedures were permitted to proceed.¹¹ Some patients who were interested in plastic surgery or had planned to have it done before the pandemic sought to have it done during the quarantine period. Through emails, phone calls, and messages, they reached out to plastic surgery centers and surgeons.¹¹ The global spread of COVID-19 has resulted in a sharp reduction in the performance of elective nonessential procedures across specialties in most impacted nations, resulting in a heavy economic burden that has affected privately owned clinics and hospitals.¹⁰

However, during the COVID-19 pandemic, individuals who underwent minimal intervention cosmetic procedures in the upper part of the face were found to have an increase in self-satisfaction and enjoyment with their looks.¹² On the other hand, some studies found no differences between the public's search for upper and lower facial cosmetic procedures.

Herein, the authors did not just seek to understand the factors influencing individuals' decision to undergo rhinoplasty during the COVID-19 pandemic but also their perception of rhinoplasty.¹³ This study demonstrated that people's views have changed about rhinoplasty. The stereotype that cosmetic procedures are for women only has become a less common belief. Moreover, our data show that approximately half of the participants do not believe that rhinoplasty is just for adults (individuals 18 years or older).¹⁴ Finally, the data illustrate that culture and religion are major factors in viewing rhinoplasty, especially in a region where almost 94% of the population are Muslims and culture is a big deterrent to social behavior.¹⁵

In this article, our data indicate that most participants believe that low self-esteem influences an individual's choice to have rhinoplasty. Similarly, a study by Aktas et al,¹⁶ who surveyed people who underwent cosmetic plastic surgery during the pandemic, showed that many of those who underwent rhinoplasty were unsatisfied with their appearance in the mirror and felt more confident while wearing a mask. However, this observation does not explain if wearing a mask made the participant more conscious of their facial features or vice versa. Another report by Bassiri-Tehrani et al¹⁷ supported this claim, where they tried to determine how

facial masks influence attractiveness. The article demonstrated that the least attractive individuals appeared significantly more attractive while wearing a mask, and the opposite happened for the most attractive individuals.¹⁷ In addition, another article discovered that covering the lower third of the face made people appear younger.¹⁸ What could be inferred from the aforementioned claims is that people have become more aware of their facial blemishes.

It is well-established knowledge these days that social media motivate and influence people to pursue cosmetic procedures.^{16,19} With the rise of social media, there is also a rise in the beauty standard of the population. In addition, social media could increase the risk of developing body dysmorphic disorder.²⁰ Despite all of that, people consider social media, especially Instagram, an informative source to further their knowledge about plastic surgery.¹⁹ Furthermore, as per our data, social media influencers and celebrities were thought to be motivational reasons to pursue rhinoplasty. This outcome can contribute to the increase in social media consumption during the pandemic, as illustrated by Sharma and Asaria.¹⁹ In addition, according to Sharma and Asaria, this sudden increase was also significantly associated with more awareness about facial plastic procedures such as rhinoplasty. The participant felt that there was a growing coverage of facial plastic surgery on social media during the COVID-19 pandemic.¹⁹ However, this finding could be the result of recall bias or a frequency illusion.

All these factors contributed to the sudden, massive surge in popularity of rhinoplasty. According to the American Society of Plastic Surgeons 2022 statistical report, there was an increase in facial procedures by 18% on average, whereas rhinoplasty grew by 37% alone.¹³ However, this increase could not just be attributed to wearing a mask. For instance, as a result of working from home, many people saw it as an opportunity to pursue cosmetic procedures. Working from home gave people the ability to recover from surgery without the need to lose workdays or take days off work.¹⁹ Another reason for the rise in popularity of rhinoplasty is that people wanted to look better after the pandemic.¹⁶

To conclude, society has become more concerned about their facial appearance after the pandemic for multiple reasons. High beauty standards imposed on society

Table 5. The Differences in Participants' Perceptions Regarding Undergoing Rhinoplasty While Wearing a Face Mask in Terms of Demographic Characteristics

Characteristic	It is necessary to do rhinoplasty while wearing a face mask		P
	No/Neutral, N = 241	Yes, N = 407	
Age (y)			0.845
18–24	105 (39.3)	162 (60.7)	
25–30	46 (37.1)	78 (62.9)	
31–40	52 (36.4)	91 (63.6)	
41–50	30 (32.6)	62 (67.4)	
51–65	8 (36.4)	14 (63.6)	
Sex			0.019
Male	55 (46.6)	63 (53.4)	
Female	186 (35.1)	344 (64.9)	
Marital status			0.684
Single	124 (38.8)	196 (61.3)	
Married	108 (35.2)	199 (64.8)	
Divorced	6 (40.0)	9 (60.0)	
Widowed	3 (50.0)	3 (50.0)	
Educational level			0.950
Primary	1 (33.3)	2 (66.7)	
Secondary	10 (41.7)	14 (58.3)	
Intermediate	61 (35.9)	109 (64.1)	
University	161 (37.8)	265 (62.2)	
Postgraduate degree	8 (32.0)	17 (68.0)	
Dominant hand			0.106
Right	205 (35.8)	368 (64.2)	
Left	25 (46.3)	29 (53.7)	
Both right and left	11 (52.4)	10 (47.6)	
Income (SAR)			0.751
<10,000	175 (38.5)	279 (61.5)	
10,000–20,000	47 (34.3)	90 (65.7)	
20,000–30,000	10 (33.3)	20 (66.7)	
>30,000	9 (33.3)	18 (66.7)	
Region of residence			0.867
Eastern	120 (36.9)	205 (63.1)	
Western	52 (36.6)	90 (63.4)	
Northern	13 (37.1)	22 (62.9)	
Southern	14 (31.8)	30 (68.2)	
Central	42 (41.2)	60 (58.8)	
Residence			0.694
Central area	203 (37.5)	338 (62.5)	
Rural area	38 (35.5)	69 (64.5)	
Have you undergone a rhinoplasty?			0.767
No	231 (37.1)	392 (62.9)	
Yes	10 (40.0)	15 (60.0)	

Data are presented as n (%). The Pearson χ^2 test and the Fisher exact test. SAR, Saudi Arabian riyal.

via social media and increased awareness of facial features due to wearing masks are all reasons for the rise in popularity of rhinoplasty. This highlights the need to understand and acknowledge the ever-changing needs of plastic surgery patients.

CONCLUSIONS

In conclusion, the COVID-19 pandemic and the wearing of masks have significantly impacted the

Table 6. The Differences in Participants' Perceptions Regarding Undergoing Rhinoplasty While Wearing a Face Mask in Terms of Perceptions About the Procedure

Characteristic	It is necessary to do rhinoplasty while wearing a face mask		P
	No/Neutral, N = 241	Yes, N = 407	
Do you believe rhinoplasty is only suitable for women?			<0.001
Strongly disagree	106 (31.0)	236 (69.0)	
Disagree	25 (39.1)	39 (60.9)	
Neutral	68 (50.0)	68 (50.0)	
Agree	22 (51.2)	21 (48.8)	
Strongly agree	20 (31.7)	43 (68.3)	
Do you believe rhinoplasty is only suitable for cosmetic purposes?			0.033
Strongly disagree	132 (33.9)	257 (66.1)	
Disagree	24 (34.3)	46 (65.7)	
Neutral	47 (51.6)	44 (48.4)	
Agree	13 (41.9)	18 (58.1)	
Strongly agree	25 (37.3)	42 (62.7)	
Do you believe rhinoplasty is only suitable for individuals older than 18 y?			0.105
Strongly disagree	65 (39.4)	100 (60.6)	
Disagree	17 (34.7)	32 (65.3)	
Neutral	49 (45.4)	59 (54.6)	
Agree	27 (42.2)	37 (57.8)	
Strongly agree	83 (31.7)	179 (68.3)	
Do you believe that many people do NOT undergo rhinoplasty due to religious purposes?			0.091
Strongly disagree	34 (26.6)	94 (73.4)	
Disagree	24 (40.0)	36 (60.0)	
Neutral	64 (38.8)	101 (61.2)	
Agree	38 (42.2)	52 (57.8)	
Strongly agree	81 (39.5)	124 (60.5)	
Do you believe that many people do NOT undergo rhinoplasty due to cultural purposes?			<0.001
Strongly disagree	26 (19.4)	108 (80.6)	
Disagree	39 (40.2)	58 (59.8)	
Neutral	93 (45.1)	113 (54.9)	
Agree	34 (37.4)	57 (62.6)	
Strongly agree	49 (40.8)	71 (59.2)	
Do you believe rhinoplasty is only done by plastic surgeons?			<0.001
Strongly disagree	31 (25.8)	89 (74.2)	
Disagree	28 (41.2)	40 (58.8)	
Neutral	67 (57.8)	49 (42.2)	
Agree	25 (37.3)	42 (62.7)	
Strongly agree	90 (32.5)	187 (67.5)	

Data are presented as n (%). The Pearson χ^2 test.

public's attitude, perception, and interest in rhinoplasty treatments. According to the research mentioned earlier, individuals who wear masks are more conscious of their appearance and are motivated to improve it. The increasing demand for rhinoplasty procedures reflects

Table 7. The Differences in Participants' Perceptions Regarding Undergoing Rhinoplasty While Wearing a Face Mask in Terms of the Beliefs About Influential Factors for the Choice of the Procedure

Characteristic	It is necessary to do rhinoplasty while wearing a face mask		P
	No/Neutral, N = 241	Yes, N = 407	
Do you believe peer pressure has an influence in the choice of having rhinoplasty?			0.101
No	45 (31.7)	97 (68.3)	
Not sure	87 (42.6)	117 (57.4)	
Yes	109 (36.1)	193 (63.9)	
Do you believe famous social media figures have an influence in the choice of having rhinoplasty?			0.031
No	15 (27.8)	39 (72.2)	
Not sure	71 (45.2)	86 (54.8)	
Yes	155 (35.5)	282 (64.5)	
Do you believe low self-esteem has an influence in the choice of having rhinoplasty?			0.002
No	20 (24.4)	62 (75.6)	
Not sure	74 (47.1)	83 (52.9)	
Yes	147 (35.9)	262 (64.1)	
Do you believe teasing and bullying in the past has an influence in the choice of having rhinoplasty?			0.002
No	10 (25.6)	29 (74.4)	
Not sure	68 (49.3)	70 (50.7)	
Yes	163 (34.6)	308 (65.4)	
Do you believe certain celebrities have an influence in the choice of having rhinoplasty?			0.006
No	13 (31.0)	29 (69.0)	
Not sure	69 (48.6)	73 (51.4)	
Yes	159 (34.3)	305 (65.7)	
Do you believe romantic relationships have an influence in the choice of having rhinoplasty?			0.004
No	59 (28.4)	149 (71.6)	
Not sure	91 (43.3)	119 (56.7)	
Yes	91 (39.6)	139 (60.4)	

Data are presented as n (%). The Pearson χ^2 test.

the public's desire to boost their self-confidence and physical attractiveness.

Limitations of the Study

Because the study is a cross-sectional study, it is very susceptible to multiple biases, such as nonresponse bias, recall bias, and detection bias. In addition, convenience sampling was used to select the article participants, which means that the sample may not represent the general population. In addition, the participants in the research will only be those who are interested in undergoing rhinoplasty during the COVID-19 pandemic. This means that the results may not be typical of the public. Finally, because the survey was sent to individuals online, it is susceptible to social desirability bias.

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DISCLOSURE

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