Cosmetic Medicine

Redefining Beauty: A Qualitative Study Exploring Adult Women's Motivations for Lip Filler Resulting in Anatomical Distortion

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Abstract

Background: Lip filler enhancement has fast become one of the most popular minimally invasive cosmetic procedures. Motivations for "overtreatment" with lip fillers are poorly understood.
Objectives: The aim of this study was to explore female motivations for and experiences of procedures that achieve an aesthetic of distorted lip anatomy.
Methods: Twenty-four females who had undergone lip filler procedures resulting in strikingly distorted lip anatomy, determined by the Harris classification of filler spread, took part in semistructured interviews about their motivations, experiences, and perceptions related to lip fillers. A qualitative thematic analysis was carried out.
Results: Four major themes are discussed: (1) the normalization of lip fillers, (2) perceptual drift which is mediated by exposure to repetitive images of larger lips on social media, (3) perceived financial and social benefits of larger lips, and (4) the relation between mental health and seeking repeated lip filler procedures.
Conclusions: Motivations for seeking lip fillers vary, but most subjects described social media impacting perceived aesthetic norms. A process of perceptual drift occurs whereby mental schema encoding expectations of "natural" facial anatomy can adapt through repeated exposure to enhanced images. The results can inform aesthetic practitioners and policymakers seeking to understand and support those seeking minimally invasive cosmetic procedures.

초록

배경: 입술 필러 시술은 가장 유명한 최소 침습 미용 시술 중 하나가 되었다. 입술 필러의 "과잉 시술"에 대한 동기는 잘 알려지지 않았다.
목적: 본 연구의 목적은 해부학적으로 왜곡된 입술의 미학을 구현하는 시술에 관한 여성의 동기 및 경험을 탐구하는 것이었다.

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방법론: 해리스 필러 확산 분류(Harris classification of filler spread)에 의해 결정된 필러 시술 결과 입술의 해부학적 구조가 현저히 왜곡된 여성 24명을 대상으로 입술 필러와 관련된 동기, 경험 및 인식에 관하여 반구조화된 인터뷰를 실시했다. 정성적 주제 분석이 수행되었다.

결과: 다음과 같은 네 가지 주제가 논의되었다. (1) 입술 필러의 정상화, (2) 소셜 미디어에서 반복적으로 큰 입술 이미지에 노출되는 것으로 인해 야기된 지각적 편향, (3) 큰 입술의 재정적 및 사회적 혜택에 관한 인식 및 (4) 정신 건강과 반복적인 입술 필러 시술 사이의 관계.

결론: 입술 필러를 추구하는 동기는 다양하지만, 대부분의 시험대상자가 소셜 미디어가 미적 기준에 영향을 미친다고 답했다. "자연스러운" 해부학적 얼굴을 향한 기대치를 부호화하는 정신적 스키마가 강화된 이미지에 반복적으로 노출되면 조정될 수 있는 지각적 이동(perceptual drift) 과정이 발생한다. 이 결과는 최소 침습 미용 시술을 원하는 사람들을 이해하고 지원하고자 하는 미용 시술 전문의와 정책 입안자에게 정보를 제공할 수 있다.

근거 수준: 4(위험)

Level of Evidence: 4

4

Risk

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The past decade has witnessed exponential growth in the popularity of both invasive and minimally invasive cosmetic procedures. Dermal fillers are the second most common global cosmetic procedure with 4.3 million procedures carried out annually and an annual rise in the number of procedures of 15.7%.[1] In comparison to invasive surgery, "injectables" are largely reversible, relatively low cost, and have minimal downtime, adding to their general appeal. Fillers may be administered to a range of sites including lips, cheeks, jaw, chin, nose, acne scars, nasolabial folds and genitalia, thus enabling individuals to subtly or drastically remodel their appearance. More recently some practitioners have identified a trend in individuals seeking facial remodeling outside of what would be considered a natural anatomical range for the individual, a practice termed "alienization."[2] Reasons for the popularity of this phenomena, also sometimes referred to as the "Instagram face," has been a subject of interest in popular media.

Female body image dissatisfaction is a well-documented finding[3] with approximately 40% of females describing moderate to strong dissatisfaction with both individual body parts as well as their body as a whole.[4] Within the past decade research into the relation between body image and cosmetic surgery has increased.[5,6] Long-standing concerns have been raised around the prevalence of underlying pathologically distorted body image, in particular body dysmorphic disorder (BDD) and eating disorders, in those seeking more extreme or repetitive cosmetic procedures. Although the estimated weighted prevalence of BDD is reported as roughly 1.9% in community adults and 3.3% in student populations,[7] this number is reportedly much higher in cosmetic procedure cohorts.[8,9] Previous research suggests people requesting cosmetic procedures have a range of other pre-existing mental health disorders such as eating disorders, depression, or anxiety.[10] A number of mental health symptoms, including depression, deliberate self-harm, suicidal ideation, anxiety, and illicit drug use, might predict an individual's likelihood of seeking cosmetic procedures.[11]

Although previous studies have explored the demographics, social characteristics, and motivations of individuals seeking a broader range of minimally invasive cosmetic procedures, including botulinum toxin injections and soft tissue filler injections,[12,13] there are as yet no known studies exploring in-depth motivations for lip filler procedures. More specifically there are no studies investigating the motivations of those individuals whose outcomes distort the normal anatomical range. The rising popularity and demand for increased frequency and larger volume lip filler procedures, and concern from practitioners wanting to avoid overtreatment, has highlighted the importance of understanding this cohort.

The aim of this study was to conduct an in-depth exploration of the motives and reasons females had for choosing lip filler procedures, encapsulated in the following research question: what are the motivations for females choosing lip filler injections resulting in outcomes outside the anatomical norm?

METHODS

Study Design

This qualitative study was carried out between October 2020 and August 2021. Participants completed an online questionnaire and were asked to email a series of facial photographs to the study email account which were used

to classify the anatomical outcomes of their lip filler procedures based on the Harris classification scale.[14] They were then invited to take part in a 60-minute semistructured interview. Interviews were transcribed verbatim and uploaded to NVivo (QSR International; Burlington, MA) for thematic analysis as described by Braun and Clarke.[15]

Recruitment of Participants

In order to recruit participants, we created a study page on Instagram (Meta Platforms; Menlo Park, CA). The search term #lipfiller was used to identify individuals with an interest in lip fillers. Messages were sent to these individuals with contact details and the words, "We are conducting a study into the experiences of women aged 18 and over who receive lip fillers of various sizes. This will be a virtual study requiring submission of a series of facial photographs, online questionnaires and with some participants also being invited to complete a telephone interview."

Categorization of Filler Spread

Photographs were submitted by participants with frontal and profile views of their face. Photographs were systematically categorized into one of 4 classes based on the Harris classification of lip filler spread (Figure 1). An example photograph of a participant included in the study (classified as Harris 4) is shown in Figure 2.

Screening for Inclusion Criteria

Self-report information on the following variables was obtained via an online questionnaire: age, ethnicity, nationality, sexual orientation, marital status, self-reported mental health diagnoses, and number of times lip fillers received. Participants were included if they were assigned female at birth, over the age of 18, and were currently receiving lip filler injectables. Participants were excluded if they were unable to complete a questionnaire or interview in English, were dissatisfied with their current lip appearance due to clinical error or were categorized by the researchers as having less extreme aesthetic outcomes (class 1-3 on the Harris lip classification system). All participants who completed an interview were reimbursed with a £20 Amazon (Seattle, WA) voucher for their time.

Interviews

Females with experience of receiving lip fillers were consulted on the design of the interview, helping inform question content. Question topics included: how participants defined beauty; body image; general attitudes and views towards lip fillers; personal motivations and influences for

Class 1: Normal with no spread.

Class 2: A ledge is formed at the vermillion border.

Class 3: A shelf is formed from filler spread beyond the border in the cutaneous lip.

Class 4: A plateau is formed (referred to as the 'duck' lip) from extensive filler spread in the cutaneous lip.

Figure 1. Lip filler classification system. Originally published in Harris.[14]

getting lip fillers; perceptions of why lip filler popularity had changed over the past decade; compulsive aspects of seeking lip fillers; and how lip fillers impacted psychosocial wellbeing. (see Appendix A for the final interview guide). Semistructured in-depth interviews were conducted via telephone or remote conferencing and lasted on average 53 minutes (range, 36-108 minutes). Interviews were recorded on an encrypted audio device.

Qualitative Data Analysis

Each interview was transcribed verbatim and the interviewee allocated a pseudonym. A systematic inductive thematic coding approach was used, where patterns and common themes are identified to describe a dataset and to understand a given phenomenon.[15] The following steps were used:

1. Transcripts were read and re-read to ensure familiarity.
2. Transcripts were uploaded to NVivo qualitative analysis software.
3. Data were systematically coded line by line by 2 authors.
4. Codes were organized into subthemes. Subtheme relationships and patterns were then examined to identify overarching themes. Themes capture a common, recurring pattern across the dataset and are relevant to the study aim.
5. Analysis was iterative, involving continuous comparison of data, codes, subthemes, and themes.
6. Transcripts were re-read to ensure the analysis was grounded in the data. The final codebook is available in Appendix B.

Codes, subthemes, and themes were discussed within the study team until a coherent and consistent pattern was agreed upon. Although the utility of qualitative intercoder reliability calculation is debated, intercoder reliability was assessed for 10% of transcripts during the analytic phase, aiming to increase rigor and transparency surrounding the coding process.[16] Krippendor's α was calculated as 0.74 (95% CI, 0.69-0.79).
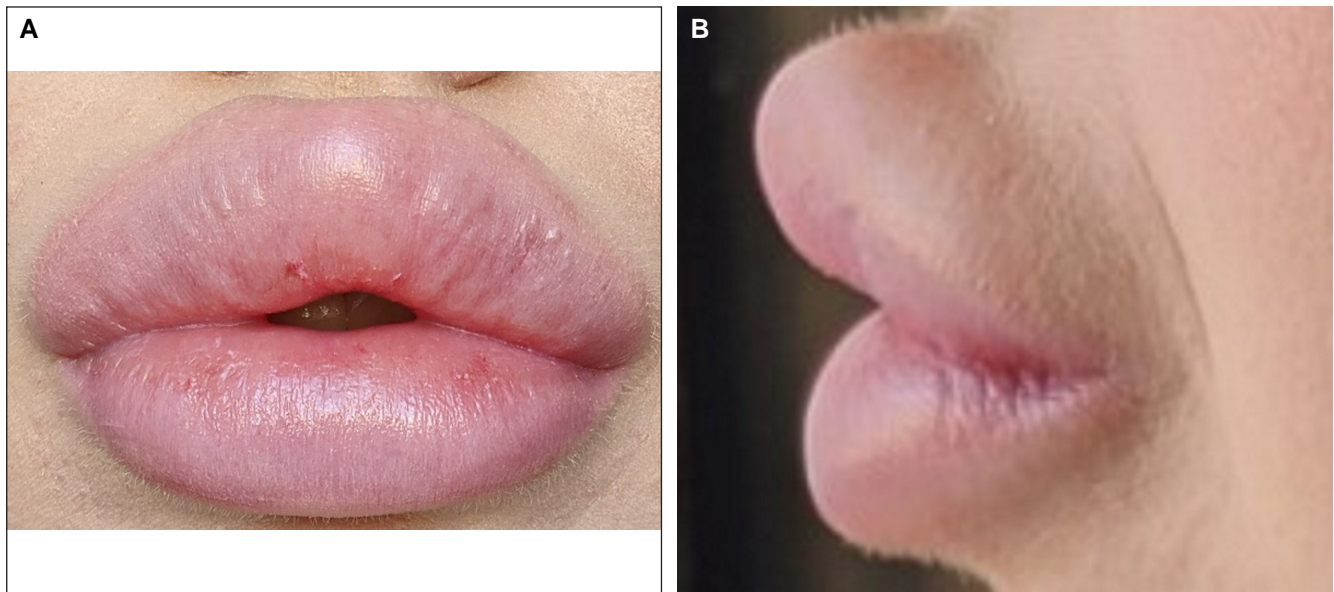
Figure 2. (A) Frontal and (B) lateral view of lips classified as Harris Class 4 in a 21-year-old female participant.

Ethical Considerations

The study was submitted and authorized by Kings College London Research ethics committee 19/20-20763. Written consent was gained from all participants. Participant anonymity was preserved through the use of pseudonyms and broad demographic categories. Participants were debriefed after the interview and signposted to relevant organizations for further support if necessary.

RESULTS

Participant Demographics

In total, 107 individuals contacted via social media platforms expressed an interest in the study, 40 of whom completed the online questionnaire. At this stage 6 participants declined to complete the semistructured interview due to feeling uncomfortable discussing their personal experiences, and a further 6 were lost to follow-up with no further contact following initial questionnaire completion. Of the remaining 28 participants who completed the semistructured interview, 24 were classified as Harris Class 4, and were therefore included in this analysis. Table 1 gives the demographic characteristics of the participant cohort on which this study is based. The mean age of participants was 24 years (range, 18-39 years).

Qualitative Analysis

Theme 1: Normalization and Fitting In
All respondents recognized a shift in beauty standards towards a preference for fuller lips. Some described this as

part of the fashion for a "slim-thick" aesthetic. Others, like Amanda, perceived a more integral norm had shifted so that, for her, something about the face was not quite right without the addition of lip-filler:

> "...Obviously it's become the norm to have a bigger lip. I'll even look at my friends and say, 'God, you need a bit of filler in those lips' even though there's nothing wrong with their lips. But now it just seems normal to have a fuller lip..."—Amanda

The relative affordability of fillers (as compared to more expensive cosmetic procedures) was also identified as a contributory market factor to this perceived normalization. Targeted advertising was also mentioned:

> "...I would see all these offers, I was constantly seeing [ads] saying 'come get lip filler' 'come get jaw filler,' they got into my head, and I would just sit there and think about it like all the time, so I started to think I may as well just do it then I can stop thinking about it..."—Rachel

Although some women reported a normalization of fillers among their real-life friendship groups, others saw a discrepancy between what was perceived as normal in their local streets vs on their social media feeds:

> "...I have seen a lot of these trends going around the internet, but in real life you don't see it as much."—Eloise

Table 1. Clinical and Demographic Characteristics of Class 4 Filler Spread Participants (N = 24)

Pseudonym	Age (years)	Ethnicity	Nationality	Reported mental disorder	No. of times lips filled	Most recent volume injected (mL)	Maximum volume ever injected (mL)
Rachel	18-20	White	British	BPAD	1-2	NR	1
Claire	25-29	Asian British	British	Nil	3-5	0.5	0.7
Sandra	18-20	White	British	ADHD, depression	3-5	1.1	1.1
Alice	18-20	White	British	Nil	1-2	0.5	0.5
Grace	35-39	White	British	EUPD, anxiety, depression	1-2	1	1
Gaby	18-20	White	South African	Depression, anxiety	1-2	1	1
Emily	21-24	Other-Arabic	British	Depression, anxiety, BPAD	3-5	1	1.1
Rosie	21-24	White	British	Nil	3-5	1	1
Eloise	25-29	White	Austrian	Nil	>10	NR	2
Amanda	35-39	White	British	Nil	6-8	1	1
Becky	35-30	White	British	Nil	1-2	NR	1.5
Sarah	21-24	White	British	Nil	1-2	1	1
Sharon	21-24	White	British	BDD	1-2	1	1
Amy	21-24	White	British	Nil	3-5	NR	1.1
Nel	21-24	White	British	Anxiety, depression	3-5	1	1
Olivia	35-39	White	Canadian	Nil	>10	1	2
Poppy	21-24	Asian British	British	Depression, anxiety	3-5	NR	1
Helena	18-20	White	British	EUPD, depression, Anxiety	>10	1	1.5
Nicky	21-24	White	British	PTSD, depression, Anxiety	1-2	NR	2
Lottie	21-24	Asian British	British	Nil	3-5	1	1
Julia	21-24	Black British	British	Nil	3-5	1.5	2
Bryony	21-24	White	British	Nil	1-2	0.5	0.5
Felicity	21-24	White	British	Nil	3-5	1	1
Kate	21-24	Other-Fijian	British	PTSD	1-2	1	1

ADHD, attention deficit hyperactivity disorder; BDD, body dysmorphic disorder; BPAD, bipolar affective disorder; EUPD, emotionally unstable personality disorder; NR, not reported; PTSD, posttraumatic stress disorder.

The perception that everyone on social media was getting cosmetic surgery was attributed to many of our respondents wanting their own "stuff done" to fit in, and being rewarded with virtual attention (likes/followers) if your own pictures fit in with certain popular aesthetics.

"…I used to get them done so that I would feel more like I fit in, so that I'd look more like pretty and you know just fit in with everyone. At that time I think it was because I felt more insecure. Once I had them [fillers], I kind of felt like, now I'm getting a good amount of attention (which

I was definitely getting more of) and I suppose that's what pushed me to get it again and again. Because I felt like, everyone is doing it, it's all over social media, and I just wanted to be part of that…"—Lottie

Theme 2: Lip Perception Drift

Although some of the women interviewed described intentionally seeking an artificial look, many of the respondents considered themselves to be achieving a natural look:

"…I think they look natural. But obviously some people who have like an eye for these sorts of things, they could tell that I've had them done… To be honest I don't really want a response as I don't really want people to know I get them done, I like to pass myself off as natural, so that's why I get a more natural plumping look…"—Poppy

"Natural" itself, although generally considered a desirable thing, was considered a flexible concept to some of the respondents. Emily, quoted below, holds on to the concept of "natural" but describes using it to mean "increased to the size that I think looks good on me":

"…For me if its natural then it's increased to the size I think looks good on me. That's how I understand natural to mean…"—Emily

Participants described a process of repeated exposure to specific aesthetics on social media leading to the development of their ideas of societal beauty standards. Some women were aware of the experience of their subjective perception of normal lip anatomy changing over time, sometimes referring to this phenomenon as "filler blindness." This is accelerated by the swelling that occurs in the 2 weeks immediately following lip injections:

"…When I get used to them, I kind of look in the mirror and wonder if they've gone down, to me they have, but to like other people they're like 'they literally have not moved… please do not get any more filler'… but to me my face just looks wrong as soon as they start to deflate a little… you get stuck in a bit of a vicious cycle really…"—Helena

Alice describes this shifting in a dynamic and multidirectional fashion over time, striking her as "bizarre" and "strange":

"…It was really bizarre, the whole psychology of it… Like they were really big looking back at them now, whereas at the time, I was adamant I needed more… really strange…"—Alice

Theme 3: Perceived Benefits

Large-volume lip fillers were understood by participants to have a mixed impact on conventional employment opportunities:

"…I think having bigger lips, to me, makes me look better, and I think people listen when attractive people speak, and my issue is that no one ever listens to me. So I feel like if I … change the way I look, then maybe they'll give me a chance and respect me… I suppose maybe going too far, is the opposite of what I want to achieve in my professional life, too much filler, too much surgery, too much of any enhancement might make people not take me seriously…"—Emily

Despite most participants' ambiguity as to the benefits of lip fillers in conventional social or economic interactions, some respondents expressed optimism that fulfilling a "new beauty standard" increases "engagement" in the economic landscape of social media influencers:

"…being on Instagram it's all about engagement … At first, I didn't think it would make a big difference to my social media engagement and stuff, but then when I started taking my pictures, it did make a lot of difference…"—Julia

Many respondents denied they were motivated by tangible external benefits that might come from having filled lips. It was a frequent claim that women's motivation to get lip fillers arose in themselves and that perceived benefits were personal. Speaking within the current psychopolitical "well-being" rhetoric,[17] many participants commented on how lip fillers made them feel better about themselves and improved their "mental health", with procedures described as acts of self-care:

"…I'd actually probably say it improves my mental health, I feel better about myself… I'm always the one who gets something done, or looks after my appearance, and I feel like it makes me feel better, like I'm looking after myself in a way…"—Sarah

Although many participants stated that they now felt content with their appearance and felt that the procedure had improved their sense of well-being, others acknowledged that this contentment was somewhat precarious or even illusionary:

Lottie: "…One of my biggest insecurities was my lips, but fillers have let me sort that out. At the moment I am happy with it, but I feel like all it will take is someone to comment or make a remark and I'll just over think again…"

Interviewer: "What if you hadn't had lip fillers, how would life be different?"

Lottie: "Probably happier, in a strange way I'd be happier. Thinking back there were no issues... if I hadn't of messed with them in the first place, I'd have been as happy as I was..."

Theme 4: Mental Health

Respondents typically described a short process of becoming dissatisfied with their lips preceding their first procedure. However many respondents described struggling with a more pervasive generalized negative body-image. The impact of social media was a pervasive theme:

"...I find that if I had a bad day or I'm feeling bad about myself, there is kind of like a correlation between how much time I spend on social media..."—Felicity

Some respondents described seeking a "buzz" they experienced after getting fillers. Other participants reported lying to aesthetic practitioners to get larger filler volumes or more frequent procedures than advised despite awareness of the risks. Some wished to cut down or stop lip filler use but were struggling to do so. Others continued to get procedures despite reporting a negative impact that their change of lip size had had upon relationships. Julia gave a detailed description of the compulsive cycle of seeking repeated procedures:

"...I do think they are addictive, mainly because, there are different stages you go through when you get your lips done... when your lips have fully healed within a month maybe two, you're now thinking, oh my gosh they're so small... even though they're not, it's just the way you now think of them and see them, it makes you want to get them done again and again..."—Julia

Although rates of self-reported mental illness were generally high, only 1 participant reported having received a formal diagnosis of Body Dysmorphic Disorder (BDD). She had struggled to access psychological treatment due to COVID-19 lock-down and waiting lists and reported that she had never been asked about her mental health by the aesthetic practitioners who carried out her procedures. However, many other participants described a spectrum of preoccupation and distress with appearance and associated checking behaviors.

"...I'd say quite a lot of the day, maybe 40%, involves either me thinking of things I could do, or products that I could use to improve my appearance or me

checking my makeup in the mirror. Me going to the bathroom at work so I can see how my body looks. So just constantly thinking what do I look like? Am I okay? Can I improve myself? ..."—Emily

For some respondents, the mutability of the lip shape that follows administration of filler could itself be a source of preoccupation.

"...I'll just keep like double checking my lips in the mirror to see that it still has like its volume, to see that it still looks big, or whether I need like a touch up, to see anything really, like if it's left markings or if its lumpy..."—Julia

BDD was not the only diagnosed mental illness in the participant group. Rachel, who had been diagnosed with bipolar disorder, described the impulsivity of a manic episode impacting on her decision to get lip fillers. Another respondent described depression exacerbating her desire to get lip fillers.

Participant views regarding the role of aesthetic practitioners in enforcing boundaries around more extreme lip filler requests, as well as screening for mental health difficulties, were variable. Some women felt that lip fillers were purely a financial transaction and as such client autonomy should be prioritized:

"...I feel like personally you should be allowed to make your own opinion... like I feel you are paying for the lip fillers so I feel like you should be able to say how much you want. I feel like even if they have a problem with it not looking 'natural' or how they would like it, you should still be able to do and get what you want...you're paying for it, so they should do it for you..."—Gaby

Others felt practitioners had a responsibility to take a more holistic approach towards an individual's motives for such procedures:

"...some [practitioners] probably just want to take your money from you, but actually, they're not doing a good job. They should be looking at you as an overall person, and your background, like whether you have body dysmorphia. Because if you don't like yourself and your doing it to hopefully make things change, they should say, like 'look, that's enough now, you've gone overboard'..."—Becky

DISCUSSION

The results of this study provide insights into the motivations and experiences of females who seek lip filler

procedures resulting in intentional filler spread beyond anatomical borders. Although the experiences reported were heterogeneous, 4 core themes were developed. Participants perceived a shift had occurred whereby cosmetic enhancements had become the norm within society and felt a need to fit in by achieving this aesthetic (Theme 1). Some participants described noticing a perceptual drift had occurred whereby their expectations of normal facial anatomy had adapted over time (Theme 2). Where economic or social benefits motivated lip filler use, these tended to cluster in the virtual world (Theme 3). Bidirectional relationships between lip filler procedures and a range of mental illness–related phenomena were suggested by participants (Theme 4).

Fitting in with beauty norms might contribute to an individual's self-acceptance through the process of receiving recognition and validation.[18] Participants typically described previous contentment with their lip size which changed to dissatisfaction through constant comparison to images they perceived represented a "new normal" in beauty. Participants suggested numerous factors contributing to normalization of large lips.[19] The role of media in motivating individuals to seek cosmetic procedures has been documented previously[20] and was firmly endorsed in this study, with the majority of our participants specifically referencing Instagram and influencer culture,[21] adding further weight to the well-established sociocultural theory of the role of the media in contributing to female body image dissatisfaction.[22] There were different assessments as to how pervasive this beauty norm was, with some noticing that the aesthetic appeared less common in their local streets than in their online worlds. We suggest that algorithms that expose an individual to images are based on personal patterns of social media use lead to an assemblage of beauty norms within a society which is not always perceptible to an individual.

This relates to our theme that participants reported changes over time in how they expected a natural face to look or described losing track of what was a normal lip shape for them. We attempt to explain this as a shift in the perceptual processing of lip size and shape over time, termed "perceptual drift."[23] Perceptual drift is understood in terms of a predictive coding model of perception,[24] whereby the brain is constantly generating and updating a mental model of the environment with a goal to minimize discrepancies between expected and perceived images. If you are repeatedly exposed to images of large lips, as well as coming to believe lip fillers to be more ubiquitous, your mental model of a face will be unconsciously updated over time to expect large lips. Non-enhanced lips, either on yourself or on others, that do not match this new prediction, therefore are perceived as "not right" in some way, without you necessarily being conscious of the shift. We theorize that in interaction with the Instagram algorithm, an extra reinforcing loop is introduced. The predictive coding apparatus of the brain has developed

an expectation for larger lips and is therefore attracted to images that fit this expectation. Detecting you prefer these images, the algorithm exposes you to more of them. To keep users interested and engaged on the platform over time, novelty is introduced as increasingly extreme versions of the aesthetic. In time these are integrated into the brain's prediction of what to expect when viewing a face, an experience akin to what it is to perceive a "normal" or "natural" face.

Some participants described dynamic perceptions of lip size, particularly when reviewing sequential photographs of their own face. This flexibility suggests that the trends for more and more extreme cosmetic enhancements will not necessarily continue in one direction. Indeed, a number of the respondents were already noticing a change in the behaviors of influencers they followed, towards dissolving their lip fillers and publicly celebrating a more "natural" aesthetic.

Perceived benefits of lip fillers were usually discussed in an abstract or hypothetical manner within the interviews, rather than reflecting the participants lived experience of having benefited in these ways. In previous studies women have described the process of cosmetic surgery as having a "restorative" effect between body and image.[25] Some participants in the current study did report such an improvement in their self-image and confidence as a result of lip filler. However, other participants recognized this improved self-image to be a temporary or transient relief, with their attention subsequently redirected to other areas of their bodies they should, and could, now try to improve.

There is a particular interest in the relation between BDD and individuals seeking cosmetic surgery.[26] In our sample, numbers diagnosed with BDD would be comparable to formally calculated prevalence rates found amongst patients presenting to aesthetic specialties.[7] Although specific preoccupations with the lips were relatively uncommon amongst our participants, we suggest that a spectrum of body image–related difficulties exist in this cohort with only the tip of this iceberg reaching threshold for a clinical diagnosis of mental disorder. Participants frequently described struggling with negative body-image particularly with regards to weight and body proportions. Our data suggest that general anxieties about the body and appearance are a prominent factor in predisposing women towards easily accessible, instantly gratifying cosmetic procedures such as lip filler injections. Body-image dissatisfaction might be prevalent for women in our culture, but the impacts should not be overlooked.

Our data suggest that different mental illnesses might influence those seeking procedures and that any screening process for mental illness should be multidimensional. Our evidence suggests that a significant minority of people having lip fillers are vulnerable to developing addictive cycles of compulsive use akin to a behavioral addiction.[27] An individual's connection to their body, tolerance of their own

suffering as well as their response to situational social demands have been suggested as factors that can predispose someone to addiction to plastic surgery.[28]

Study Limitations

Although the current study provides unique insights into women's experiences of lip filler overtreatment, some limitations must be considered when interpreting the results. Recruitment via social media lead to a variable response rate. This impacts on how representative our sample can be considered: we may be missing the views on the more "successful" influencers with this aesthetic, as well as perhaps the views of those struggling to greater degrees with poor mental health. As all participants were all recruited via Instagram, this might have led to an exaggeration of the role of this particular social media platform in our findings. The generalizability of our findings is also restricted by study methodology. Including only English-speaking participants prevented representation of other cultural and geographical perspectives. Due to predefined inclusion criteria, our sample only includes women assigned female at birth aged over 18 years. The perspectives of men and transgender people, as well as of 16- to 18-year-olds are therefore not included. Both men and transgender women may have contributed a valuable different perspective on the increasing lip size phenomenon. Adolescence was considered by many of our participants to have been when their own wish for procedures started, so inclusion of this cohort may have provided further interesting perspectives as to the early dynamic changes in body image and self-esteem. We also only included participants who were pleased with the appearance of their lips following their procedures, so we are not able to comment on the experience of people who have had very negative experiences of lip fillers. Diagnosed mental illnesses are based on self-report only, limiting the reliability of the information.

Implications and Future Research

The results of this study have implications for those seeking to understand the impact of social media on body image and aesthetic practitioners wanting to better understand and support clients pursuing overtreatment with lip fillers. Our findings suggest that the images we are repeatedly exposed to shape our perception of norms, even in such fundamental tasks as the perception of human facial anatomy, and social media algorithms can accelerate this process. It may be helpful for practitioners to understand that their clients may have been through a process of perceptual drift where their expectation of natural lip anatomy no longer matches that of wider society. Practitioners who themselves undergo filler procedures should be aware of their own perceptual drift which might play into the aesthetics they achieve for their clients.

We also suggest that there is a spectrum of underlying difficulties with body image and behavioral addiction in this group, with a significant minority suffering from mental disorder which may be frequently undiagnosed. Although many aesthetic practitioners are not medical professionals, opening up conversations with clients about topics such as the impact of social media use, mental health, and poor self-image may ultimately result in some clients feeling more understood and more holistically treated.

A key issue in cosmetic surgery research is how to best ensure satisfaction with the procedure in the long term. Many practitioners wish therefore not to "overtreat." This study suggests that what constitutes "overtreatment" will differ for different clients. Future studies may wish to consider exploring the experiences of lip filler procedures among other genders, adolescents, and those who were left unsatisfied with the outcomes of filler procedures. It may also be of interest to investigate the role of socioeconomic circumstances on motivations for lip-fillers. Furthermore, the results of this study could inform a quantitative study looking at overall rates of mental illness, body-image disturbance, and perceptual drift phenomena, in cohorts seeking lip filler. One approach could be to explore potential group differences between individuals seeking lip filler within the normal anatomical range vs those seeking a more distorted outcome. A neurocognitive experimental paradigm would be necessary to clarify the role that we suggest image-based algorithmic social media plays in perceptual drift.[29]

CONCLUSIONS

This study explores what motivates women to seek filler procedures that result in lip size and shape outside the normal anatomical range. This phenomenon, although widespread and increasing, has not been previously investigated. Motivations for seeking excessive lip filler are often underpinned with a desire to fit in with a shifting perception of norms, mediated in large part via social media. We provide evidence that significant minorities of those seeking procedures are likely to have undiagnosed mental illness or compulsive aspects to their behavior. These findings draw attention to the heterogeneity of motives for seeking extreme aesthetic outcomes through minimally invasive cosmetic procedures and suggest a need for more open discussion between clients and practitioners.

Supplemental Material

This article contains supplemental material located online at www.aestheticsurgeryjournal.com.

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