

Perceptions of Aging in the Orofacial Region: Insights from a Qualitative Interview Study

Qiuying Yao¹, David Attenborough², Ke Yang^{3*}

¹Department of Health and Environmental Sciences, Xi'an Jiaotong-Liverpool University, 111 Ren'ai Road, Suzhou, Jiangsu Province, 215123, China.

²Department of Public Health, Policy and Systems, Institute of Population Health, University of Liverpool, Brownlow Hill, Liverpool, L697ZX, UK.

³Global Health Research Center, Duke Kunshan University, No. 8 Duke Avenue, Kunshan, Jiangsu Province, 215316, China.

*E-mail ✉ yangke2009@gmail.com

Abstract

This study explored how adults aged 65 and older perceive their orofacial appearance (OA). Twenty participants aged 65–79 were purposefully recruited from the Swedish National Study on Aging and Care—Blekinge (SNAC-B) in Karlskrona. Semi-structured interviews were conducted using a pre-developed interview guide, and the data were analyzed through thematic analysis to identify recurring patterns and themes. Four key themes emerged regarding older adults' experiences of their OA: (i) acceptance of their current orofacial appearance—"you kind of have to like the situation as it is now"; (ii) the gradual decline associated with ageing—"an ageing orofacial appearance, a slow continuous downhill slope"; (iii) appearance concerns shaped by social norms—"looking good for others to fit the social norm"; and (iv) maintaining orofacial appearance—"seemingly without effort." Participants displayed a dual perspective on their own OA. While societal expectations often favor a youthful appearance, actively striving to appear younger was generally viewed negatively, highlighting the complexity of self-perception in ageing OA. Dental problems were the primary factor that made teeth significantly influence participants' perceptions of their OA.

Keywords: Aging, Older adults, Orofacial appearance, Oral health, Self-perception

Introduction

Orofacial appearance (OA) influences how people perceive themselves and how others perceive them, making it an important aspect of social and personal life across all ages [1]. Today's older adults are generally more educated [2, 3], maintain higher cognitive function, and often continue working past the traditional retirement age [3]. Despite these advancements, OA is often not a major concern for this population [4, 5].

The concept of "appearance" refers to observable physical traits, including facial structure, body shape, and overall visual impression [6]. In the context of OA, researchers distinguish between facial and dental appearance. Dental aesthetics, in particular, play a key role in shaping self-confidence, social engagement, and overall quality of life [1, 7]. Since these features are often the first to be noticed in social interactions, they carry substantial social weight [8]. However, there remains no universally accepted definition of OA.

Perceptions of appearance extend beyond visible traits. Body image, for instance, encompasses how individuals perceive their physical self and includes associated beliefs, feelings, and behaviors [9]. Similarly, an individual's view of their dental aesthetics or oral health can shape their sense of OA. Drawing from Cash [9] and the orofacial aesthetic scale [10], OA can be described as

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the subjective perception of one's facial, oral, and dental characteristics.

Aging introduces visible changes in facial and oral structures, which can affect OA. The process of facial aging involves complex alterations in bone structure, soft tissue volume, fat distribution, and skin texture [11-13]. These components age in a connected manner, so changes in one area influence the others, shaping the overall aged appearance [12, 13]. Typical signs of facial aging include wrinkles, loss of firmness, and skin discoloration. Oral and dental aging may manifest as thinning or elongation of the lips [14, 15], tooth discoloration, enamel wear, cracks, and dentin exposure [16, 17].

Oral health also evolves with age, impacting perceptions of OA. Research indicates that older adults today (aged 68–76) generally retain more teeth and experience fewer oral diseases than previous generations [18-20]. Yet, an individual's perception of their oral health or dental appearance can strongly influence how they experience OA, regardless of objective oral health [21]. While prior studies have examined orofacial aging [12, 13, 15, 22] and body image in older adults [23-26], the voices of older adults themselves about their aging faces remain largely absent. Understanding the perspectives of today's educated older adults in dental care settings is therefore crucial, particularly given that their expectations for oral health and appearance may differ from those of past generations.

Aim

This study explores how older adults, specifically those aged 65 and above, perceive their own orofacial appearance (OA) and how it affects their self-experience.

Materials and Methods

Study design

To gain in-depth insights, we used a qualitative approach guided by semi-structured interviews. Participants were chosen strategically to ensure a range of experiences and backgrounds. The interviews were analyzed using an inductive thematic approach, following Braun and Clarke's methodology (2022). The research design also aligns with the COREQ guidelines for qualitative reporting [27].

Participants and recruitment

The study drew participants from the SNAC-B cohort in Karlskrona, Sweden, part of the long-term Swedish National Study on Aging and Care (SNAC). SNAC tracks older adults over time to study changes from work life to retirement and later years [28]. Follow-ups occur every six years for participants under 78 and every three years afterward. Detailed information about SNAC-B is published elsewhere [2, 29].

For this study, 20 individuals were selected from the 2019–2021 follow-up using purposeful sampling. Selection aimed for diversity in age, gender, and dental status. Specifically, we included the first five men and women with the most natural teeth and the first five men and women with the fewest teeth from a coded list of 66- and 72-year-olds. Inclusion criteria required participants to be fluent in Swedish, of retirement age, and between 65 and 79 years old. Participants are referred to as "informants" throughout the paper.

Initial contact involved sending detailed study information by mail, followed by a phone call from the first author (SH) to confirm participation. Of the first 20 invited, four declined and one could not attend. Five additional individuals were invited following the same procedure, resulting in 20 informants—ten men and ten women—with an average age of 72 years (range 68–76) (Table 1).

Table 1. Description of included informants.

ID:	Gender	Age
I:1	Male	68
I:2	Female	68
I:3	Female	74
I:4	Female	69
I:5	Female	68
I:6	Male	68
I:7	Male	76
I:8	Male	74
I:9	Female	76
I:10	Female	69
I:11	Male	74
I:12	Female	76
I:13	Female	76
I:14	Male	76
I:15	Male	68
I:16	Male	68
I:17	Female	69
I:18	Male	74
I:19	Male	69
I:20	Female	74

Data collection and procedure

Between May and June 2023, each participant took part in an individual interview at the Blekinge Institute of Technology Research Clinic. Prior to the conversation, participants were asked to give permission for the sessions to be audio-recorded.

The interviews followed a semi-structured guide developed specifically for this study (see Supplementary File). A pilot session led to minor revisions to improve clarity for one question. The guide focused on participants' experiences and views of their orofacial appearance. For example, they were asked, "Can you tell me what your thoughts are concerning your orofacial appearance?" When needed, follow-up questions were used to encourage deeper reflection, such as, "Could you give an example?" or "Could you explain that further?" At the start of each interview, participants were reminded that the purpose was to share their personal experiences and attitudes toward OA. To assist with reflection, a reference sheet defining OA and listing synonyms for "appearance" (**Figure 1**) was placed in front of them. All sessions were led by the first author (SH), with support from the last author (PA); neither had prior personal connections with the participants.

Interviews lasted an average of 27 minutes, ranging from 15 to 48 minutes, and were transcribed word-for-word. These sessions were part of a larger study, in which the overall average interview duration was 58 minutes.

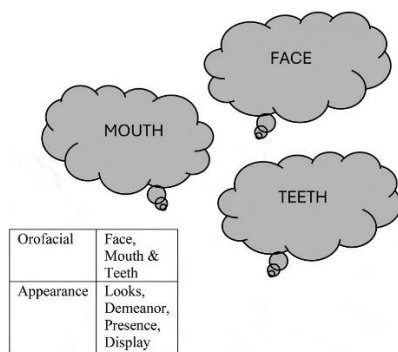


Figure 1. The individual perception of one's own physical characteristics of the face, mouth, and teeth.

Data analysis

To understand how older adults experience their orofacial appearance (OA), the interviews were analyzed using thematic analysis [30]. The process followed six structured steps, adapted from Braun and Clarke [30, 31]. First, the research team immersed themselves in the data. Each transcript was read several times, and notes were made to capture initial impressions and patterns. All authors (SH, PA, NL, VWB) independently reviewed the material before coming together to discuss early observations.

Next, the first author (SH) began coding the data, identifying meaningful segments related to OA. These preliminary codes were reviewed with the last author (PA) and later discussed with the full team to ensure consistency and depth.

In the third step, similar codes were grouped to create initial themes. These themes were iteratively reviewed and refined by the authors to ensure they accurately represented the participants' experiences. During the fourth step, the themes were further developed, with repeated examination of the data to check coherence and relevance.

The fifth step involved exploring connections between codes and themes. The team worked collaboratively to define, clarify, and name each theme. Finally, in the sixth step, the first author organized the themes into a structured narrative. Representative quotations from participants were selected to illustrate each theme clearly [30].

All data were managed using NVivo Release 1.7.1 (QSR International Pty Ltd.). **Table 2** provides examples showing how codes were identified and organized into themes.

Table 2. Examples of codes and themes

Quote	Code	Theme
"... naturally, you want to improve your appearance. That's normal. But it's important to... well, you look the way you look, and you need to come to terms with it" (I:13)	Embracing one's facial appearance	Accepting your current orofacial look as it is

“... of course, you notice you’re aging when you see your reflection and start resembling your mom more. It just feels like, well, it’s happening too quickly, I often think about it” (I:12)

Physical changes due to aging and associated emotions

The gradual decline of an aging facial appearance

Ethical approval

All study procedures followed ethical standards as outlined in the World Medical Association Declaration of Helsinki [32]. An amendment to the ongoing SNAC study (No: LU 604/00) was approved by the Swedish Ethical Review Authority (No: 2023–01020–02), reviewed by the same committee that approved the original study. Prior to participation, all informants provided both written and verbal informed consent. Data were anonymized and securely stored in accordance with EU data protection regulations [33]. Participants were informed that their involvement was voluntary and that they could withdraw at any point without any consequences.

Results and Discussion

The thematic analysis revealed four key patterns in how older adults experience their orofacial appearance (OA):

Accepting OA as it is – adapting to the current state

Most informants admitted that OA was not something they frequently considered. Many downplayed its importance, often using humor or lighthearted comments to avoid deeper reflection. Some recognized minor concerns but quickly minimized them, while others emphasized full acceptance, noting that appearance had become less central over time. Several women mentioned that they no longer felt the need for makeup, and external opinions no longer influenced them as they once might have. Informants felt that OA may have been more significant earlier in life, particularly when social judgments played a larger role.

"I find it a bit difficult to talk about, because I haven't considered it. Neither my face nor my teeth" (I:18)

"Well, you look like you do. You can't change it. I never use makeup anymore. Perhaps I should, but I don't" (I:13)

Even though they acknowledged changes in OA over time, these were not perceived as negative. Participants attributed their acceptance to shifting priorities, increased self-awareness, and a sense of maturity that accompanies age. They were generally content with their appearance,

recognizing life's effects without feeling compelled to correct them.

"It doesn't make you feel better, it's just bothersome" (I:3)

For some, discussing OA was challenging simply because it had never been a topic of conversation. Others who had historically looked attractive described it more as a matter of not needing to focus on their appearance, rather than actively reflecting on it.

"Nah... But it feels a bit silly to say it, but I looked really good when I was young... I've never really thought about it myself, like until someone says it" (I:20)

Ageing OA – a gradual decline

Perceptions of OA in relation to age varied among informants. Many compared themselves to peers, noticing changes but also recognizing that others had aged as well. Some only noticed changes when viewing photographs from previous years. Wrinkles were the most obvious sign of facial aging, along with yellowing and shifting of teeth. For those actively engaged in daily life, changes were less noticeable, while others felt the physical signs of aging more acutely.

"...my God, how old they have got ... then you think... do I look just as old myself – I guess I must do – like, nooo, you know (laughs)" (I:20)

"Sometimes you think to yourself, my goodness, those teeth are really yellow" (I:3)

Less pleasant changes in orofacial appearance with age

As participants reflected on the aging process, several physical changes in OA were highlighted. These included increased facial hair, noticeable growth of the nose, and skin that appeared looser or sagging. Women, in particular, emphasized the impact of these changes on their facial expression, noting that remembering to smile was important to prevent appearing unintentionally angry due to downturned mouth corners. While participants understood intellectually that OA changes with age, experiencing these changes felt different. Many disliked signs of aging, often feeling younger than they appeared, and sought to be seen by others as more youthful. Aging was accepted in principle, but ideally, its signs should remain subtle. Some female participants described a sense of loss, as though observing their changing

appearance from the outside without being able to intervene.

"But now that I think about it, something that really bothers me is that I get so many whiskers... that I have to pull out all the time. It is very irritating... coarse, really tough. It is no fun" (I:4)

"Yes, of course I can see that... Good lord. Stop. I cannot take it any more... wrinkles and structure... it is not always easy to deal with. I had not really considered it" (I:12)

Medical conditions, particularly periodontal disease, also influenced perceptions of OA. Participants experiencing oral health problems often noticed changes in their appearance mainly in relation to these issues. Tooth loss, for instance, contributed to a perception of an older-looking face, even when individuals felt younger internally. Across the board, all informants recognized the importance of teeth in shaping OA, whether they had current or past oral health challenges.

"...when I lost my teeth, I looked completely different... you look a little too old. Even though I do not feel old inside. It is a big minus if you have a prosthesis or no teeth... like me down there... none" (I:2)

Looking good for others to fit the social norm

Although some informants initially downplayed the importance of OA, most acknowledged that it carried social significance. Faces, mouths, and teeth are highly visible, often forming the first impression in social interactions. Opinions varied on how much this mattered. For some, presenting a pleasant appearance was important, while others aimed to look "normal" without exaggerating concern. Validation from others, such as receiving compliments on youthful appearance, was valued by some participants.

"This... it is probably highly significant because that is the first thing people look at... if you do not want to, you just have to look the way you do" (I:4)

"Yes, the face is really important... it is the first thing you encounter... I want to look healthy" (I:5)

"Teeth are really important... it looks dreadful when some people turn up with gaps... it is probably the most important... at least what you see when you laugh" (I:11)

The effort invested in OA also depended on social context. Some participants paid less attention when interacting with close family or friends, while others prioritized appearance even with those closest to them. Social norms and societal expectations influenced perceptions of aging and OA, although participants

differed in how much they felt affected by these pressures. Some noted a subtle sense of envy toward those who retained features they had lost, while others emphasized personal comfort over trends.

"You do not think about it with close friends and family... but I meet a lot of people politically, so then you think about how you look, trying to fix what can be fixed" (I:20)

"It is obvious on TV with beautiful white teeth... then you think about it... I only have so and so many teeth" (I:7)

"I do not really care about trends... it just needs to look fresh and neat... it does not matter what the current trend is" (I:1)

Coping with non-age-related challenges in OA

Participants described difficulties managing changes in OA that were not directly related to normal aging but still caused concern. These issues, such as damaged teeth, periodontal disease, or waiting for tooth replacement, made them feel self-conscious because the changes were visible to others. Some avoided smiling or opening their mouths in social situations. In a few cases, dental problems significantly affected social life, leading to feelings of involuntary loneliness and self-imposed isolation.

"No, no way... sitting close to strangers... I cannot meet... I am so embarrassed... I am embarrassed by my speech, appearance and that I spit when I talk... With or without teeth, it is awkward; plus that it smells" (I:2)

Keeping up orofacial appearance – seemingly without effort

Despite these challenges, participants emphasized the importance of maintaining personal grooming and managing OA. Women often focused on looking after their facial features to slow visible aging, using makeup, stylish glasses, or whitening toothpaste. Men typically maintained a routine of brushing, washing, and shaving, without particular attention to social context. For some, caring for their appearance was tied to well-being; for others, it was less about vanity, as one man noted: "men don't go and look in the mirror" (I:14).

"I think it is important... so you do not decay any more than you do anyway as you get older" (I:17)

"...a little hair growing here and there. Eyebrows like bushes. I keep an eye on that kind of thing... trim a bit, hold it back" (I:1)

Maintaining OA—whether through daily grooming, oral care, or cosmetic routines—was linked not only to appearance but also to a sense of confidence and well-being. The condition of their teeth was particularly crucial, especially for those who had lost or damaged teeth, influencing both functionality and appearance.

"Teeth have been a part of me, so naturally I would like to replace them... it has been very important to me... in terms of both appearance and function. While waiting for the implant, I was aware of what it meant for my mouth" (I:5)

While most participants were reluctant to undergo surgery purely for aesthetic improvement, some considered minor changes, such as teeth whitening or subtle lifting of drooping areas like the chin or eyelids. Those with dental issues preferred permanent implants over removable dentures.

"Possibly teeth whitening... I would not have surgery... it would be nice if they were a bit whiter, but it is not necessary" (I:17)

"If my teeth are not my own, they must be as close as possible to my own" (I:5)

A few participants had undergone medical or cosmetic facial procedures. They emphasized that any procedure should be discreet and not immediately noticeable. Cosmetic procedures for purely aesthetic reasons were generally viewed critically, whereas medically necessary corrections were accepted.

"I tattooed a lip liner so my mouth stands out more... without injections... it should not be visible... it also makes you feel sprightlier" (I:4)

"Medically essential things... necessary for health... but cosmetic procedures only for aesthetics... verging on crazy... I am against that" (I:1)

The primary finding of this study highlights a dual experience among older adults regarding their orofacial appearance (OA). This duality emerged clearly across the four themes: accepting OA as it is, experiencing the slow decline of an ageing OA, wanting to look good to fit social norms, and maintaining OA seemingly without effort. Overall, participants expressed a sense of acceptance or contentment with their current OA. Yet, despite this acceptance, observing changes in OA could be challenging, even when participants believed it should not matter. OA remained important in social interactions; participants wanted to appear youthful and attractive, but they also preferred a natural look without obvious attempts to appear younger. Teeth were recognized as a

central component of OA, although some participants who did not perceive issues with their teeth focused more on other facial features.

One aspect of the duality was the tension between acceptance of OA and the difficulty of witnessing one's own changes over time. Participants frequently framed OA as normal for their age, acknowledging wrinkles and other signs of ageing. This acceptance may reflect either genuine contentment or the perception that OA becomes less relevant with age. Previous research on body image has shown that older adults often demonstrate higher self-acceptance of their ageing appearance compared with younger individuals [34, 35]. Nevertheless, some, particularly women, may feel a disconnect between their physical appearance and their younger "inner self," experiencing tension when these no longer align [36-38]. Importantly, the coexistence of contentment and difficulty observing ageing changes has not been extensively documented in prior studies.

Although OA may be perceived as less critical in older age [4, 5], with health and functional abilities taking precedence [39, 40], older adults may still hold less favorable views of their facial attractiveness due to societal standards equating youthfulness with beauty [41, 42]. In the present study, women generally placed greater importance on OA than men, who seemed to value appearance less, consistent with previous findings [35, 42, 43]. Men's focus on appearance appears to have been stronger when they were younger, while women maintained a stable interest in appearance throughout adulthood [35, 44]. This difference may reflect societal norms, where men are often judged by performance and women by appearance [45-48]. The "double standard of aging" posits that aging is judged more critically in women, making the loss of youthfulness more impactful [49]. In line with this, some women in the study reported feeling invisible in a society that emphasizes appearance, reflecting the societal stereotype that older adults have limited social value [24].

Another dimension of duality was the tension between the desire to appear age-appropriate while simultaneously maintaining a youthful look. Participants acknowledged that OA should align with their age but also expressed a wish to look younger than they were. Similar findings have been reported in other studies, highlighting the sociocultural pressures to balance age-appropriate appearance with resistance to signs of aging [24, 40, 50]. For example, older adults often feel

expected to “age gracefully” while resisting certain age-related changes [40].

Both men and women expressed a desire to appear younger, but the motivations differed. Women placed greater emphasis on a youthful appearance as a marker of value and attractiveness, whereas men may associate youthfulness more with functional ability [46, 51]. Women were more likely to use makeup or non-invasive treatments to manage signs of ageing [24], reflecting social pressures to look younger [34]. Participants in this study not only sought a youthful appearance but also perceived themselves as looking younger than their peers, which aligns with research linking perceived youthfulness to more positive ageing experiences [52]. Conversely, an older appearance was associated with less favorable ageing perceptions.

Finally, participants emphasized that caring for OA was important, but the effort invested should appear effortless. Maintaining a balance between age-appropriate appearance and youthfulness was key. Interestingly, approximately one-third of participants reported actively trying to look younger, whereas nearly twice as many felt they naturally appeared younger. This discrepancy highlights the complex relationship between subjective perceptions of ageing and OA [52].

Being perceived as natural and “down-to-earth” was an important consideration for the informants in this study. Previous research by Ojala *et al.* [51] indicated that both ageing women and men valued maintaining a natural appearance, as it was seen as socially preferable to appear authentically aged rather than artificial, influencing choices related to appearance. Hurd Clarke and Griffin [39] suggested that “natural appearance” refers more to looking unaltered and socially acceptable rather than genuinely untouched. In this study, male informants in particular emphasized that maintaining a natural look was not about vanity or excessive concern with appearance. Individuals who were perceived as overly focused on their looks were generally viewed negatively. Given the Scandinavian background of many participants, this attitude may reflect the influence of the Law of Jante—a cultural principle discouraging individuals from standing out or claiming superiority [53].

Teeth were universally recognized as a crucial component of OA. However, for those without dental problems, other facial features often received more attention. Participants who had experienced dental issues—either currently or in the past—described

feelings of shame and social withdrawal, consistent with previous findings that tooth loss can be likened to the “amputation” of a body part [54]. Social implications of oral health were particularly pronounced; participants with periodontitis or tooth loss reported an OA that appeared older, and self-esteem was affected. Dental implants were generally accepted as a preferred replacement, while removable dentures were associated with age, decline, and a sense of defeat [55]. Similar to Johannsen *et al.* [54], participants who received implant treatment reported improvements not only in function but also in the aesthetic perception of their OA.

All informants were aware of age-related changes in their teeth and oral cavity. According to Warren *et al.* [56], “appropriate ageing” involves accepting aesthetic changes in the mouth while balancing self-care and a healthy perspective on appearance. This supports the duality described earlier: participants desired to maintain an age-appropriate OA while managing the psychological and social implications of visible ageing. Future research could explore OA perceptions across diverse cultural contexts, as limited evidence exists on how cultural backgrounds may influence these experiences.

Strengths and limitations

To ensure sufficient informational power for the interview sample, the study followed the guidance of Braun and Clarke [30] and the information power model by Malterud *et al.* [57]. Given the broad research aim, the relatively undefined nature of the topic, and strategic recruitment, a sample of 20 informants was deemed adequate. The number of participants allowed for in-depth discussions on a topic that was often unfamiliar or sensitive. Informants were informed about the study’s focus, but the interviewer’s background as a registered dental hygienist was not disclosed to avoid bias, likely increasing the credibility of responses.

Participants were aged 65–79 years to focus on experiences before significant health changes typically occur around 80 [58]. Rigour and quality were ensured by following COREQ guidelines [27] and considering credibility, transferability, dependability, and confirmability [59]. Debriefing sessions strengthened credibility, detailed descriptions supported transferability, consistent interview methods and timeframes ensured dependability, and reflective analytical discussions with team members reinforced confirmability. Data extracts were provided with

references to individual interviews, further supporting transparency and trustworthiness.

Conclusion

This study highlights a dual perception of OA among older adults. While society often prioritizes youthfulness, striving for a visibly youthful appearance is sometimes viewed negatively, reflecting the complexity of self-perceptions of ageing. Dental health was particularly significant for those who had experienced problems, emphasizing the central role of teeth in the perception of OA. Overall, participants balanced acceptance of age-related changes with subtle efforts to maintain a socially and personally acceptable appearance.

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