



# **Research Article**

# **Exploring Motives and Perceived Barriers for Voice Modification: The Views of Transgender and Gender-Diverse Voice Clients**

Jenny Holmberg, a,b lda Linander, b,c Maria Södersten, d,e and Fredrik Karlsson Denny Holmberg, a,b and Bredrik Karlsson Denny Holmberg, a b,b and Bredrik Karlsson Denny Holmberg, a b,b and Bredrik Karlsson Denny Holmberg, a b,b and Bredrik Bredrik Karlsson Denny Holmberg, a b,b and Bredrik Bred

<sup>a</sup> Department of Clinical Sciences, Umeå University, Sweden <sup>b</sup> Umeå Centre for Gender Studies, Umeå University, Sweden <sup>c</sup> Department of Epidemiology and Global Health, Umeå University, Sweden <sup>d</sup> Division of Speech and Language Pathology, Department of Clinical Science, Intervention and Technology, Karolinska Institutet, Stockholm, Sweden <sup>e</sup> Medical Unit Speech-Language Pathology, Karolinska University Hospital, Stockholm, Sweden

#### ARTICLE INFO

Article History: Received January 17, 2023 Revision received March 1, 2023 Accepted March 28, 2023

Editor-in-Chief: Cara E. Stepp Editor: Kathleen F. Nagle

https://doi.org/10.1044/2023\_JSLHR-23-00042

#### ABSTRACT

**Purpose:** To date, transgender and gender-diverse voice clients' perceptions and individual goals have been missing in discussions and research on gender-affirming voice therapy. Little is, therefore, known about the client's expectations of therapy outcomes and how these are met by treatments developed from views of vocal gender as perceived by cisgender persons. This study aimed to explore clients' individual motives and perceived barriers to undertaking gender-affirming voice therapy.

**Method:** Individual, semistructured interviews with 15 transgender and genderdiverse voice clients considering voice therapy were conducted and explored using qualitative content analysis.

**Results:** Three themes were identified during the analysis of the participants' narratives. In the first theme, "the incongruent voice setting the rules," the contribution of the voice on the experienced gender dysphoria is put in focus. The second theme, "to reach a voice of my own choice," centers around anticipated personal gains using a modified voice. The third theme, "a voice out of reach," relates to worries and restricting factors for not being able to reach one's set goals for voice modification.

**Conclusions:** The interviews clearly indicate a need for a person-centered voice therapy that starts from the individuals' expressed motives for modifying the voice yet also are affirmative of anticipated difficulties related to voice modification. We recommend that these themes should form the basis of the pretherapy joint discussion between the voice client and the speech-language pathologist to ensure therapy goals that are realistic and relevant to the client.

Gender dysphoria describes the stress or discomfort that may be experienced by a person whose gender identity differs from the assigned sex at birth (Coleman et al., 2022). A mismatch between voice and gender identity can be a prominent part of gender dysphoria and may lead to a wish to modify the voice. Voice change can be reached through behavioral, hormonal, or surgical interventions (Coleman et al., 2022). For people presumed male at

Correspondence to Jenny Holmberg: jenny.c.holmberg@umu.se. *Disclosure:* The authors have declared that no competing financial or non-financial interests existed at the time of publication.

birth, voice training is often needed to reach a voice in better alignment with the gender identity since hormone treatment with estrogen has no effect on voice (Mészáros et al., 2005). People presumed female at birth and who are on androgen hormonal treatment usually experience a lowering of the pitch (Nygren et al., 2016). However, this pitch lowering is not necessarily sufficient to meet the person's needs and expectations (Azul, 2015, 2016; Ziegler et al., 2018) and may also be accompanied by voice problems such as vocal fatigue or voice instability (Azul et al., 2017; Nygren et al., 2016). Moreover, hormonal treatment with testosterone is not relevant for, or desired by, all clients presumed female at birth. Voice therapy can therefore be

relevant for transgender people of all genders and address voice problems related to both identity and vocal function.

Globally, the access to health care services for transgender and gender-diverse (TGD) persons varies (Coleman et al., 2022). In Sweden, six specialized multiprofessional gender identity teams perform the initial assessments of TGD adults eventually resulting in a diagnosis of gender dysphoria, according to ICD-10 (International Statistical Classification of Diseases, Tenth Revision; World Health Organization, 1993). A gender dysphoria diagnosis provides access to further state-funded medical care (National Board of Health and Welfare, 2015). In Sweden, all TGD clients with a diagnosis of gender dysphoria are offered referral to a speech-language pathologist (SLP) for further evaluation and treatment related to their voice and communication (Södersten et al., 2015). Clients who get access to gender-affirming voice therapy at SLP clinics in Sweden are thereby persons experiencing gender dysphoria. In accordance with the Standards of Care (Version 8), the purpose of genderaffirming voice and communication therapy provided by the SLP is to assist the client in reaching a voice that matches the desired presentation in society (Coleman et al., 2022). The clients' own perceptions of their voices and objectives for modifying the vocal gender expression should therefore form the basis for clinical goal setting and evaluation of therapy outcomes. While self-reported satisfaction has received increased attention in voice and communication research (Pickering & Greene, 2019; Quinn et al., 2022), client-reported therapy goals have often been overlooked in research reporting on genderaffirming voice therapy. Instead, evaluations of voice therapy outcomes have predominantly relied on normative acoustic descriptions of what may distinguish speakers' voices depending on their gender assigned at birth (Oates, 2019; see also reviews by Leyns et al., 2021; Oates & Dacakis, 2015). It has, however, been observed that not all clients aim for a vocal expression that is perceived as either feminine or masculine (Azul, 2016; Davies & Goldberg, 2006; Davies et al., 2015; Zimman, 2012). Further, it may not be assumed that clients' expected therapy outcomes are aligned with listeners' perceptions or with the assumptions of clinical professionals (Azul et al., 2018; Quinn et al., 2022; Smith, 2020). SLPs therefore need a solid grounding in the diversity of how the voice is viewed by the client, as well as the diversity of desired treatment outcomes, to ensure therapy goals relevant to the client.

Once clinical therapy goals have been set, the client's self-confidence in pursuing them is critical for ensuring therapy effectiveness and, by extension, client satisfaction. Studies have shown that perceived self-efficacy is of great importance for the pursuance of therapy goals when faced with obstacles (van Leer, 2021) and for goal attainment (Bandura & Locke, 2003). Self-doubt or other negative thoughts are likely to reduce adherence to voice therapy and may diminish, delay, or even prevent progress. Further, doubting one's ability to reach the voice change aimed for may negatively affect clients' experience of gender-affirming voice therapy and increase the risk of therapy dropout. Therefore, it may be of importance for SLPs to identify possible barriers and to assist clients in finding helpful strategies for increasing self-efficacy (Dacakis et al., 2022; van Leer et al., 2008).

TGD persons' views on the result of voice modification have been addressed in previous research and indicated various experiences of the process and outcomes of voice therapy (Leyns et al., 2022) and testosterone treatment (Azul, 2016; Zimman, 2012). However, clients' expectations on gender-affirming voice and communication therapy have not been explored to date. Our knowledge on how these aspects may influence therapy adherence and constitute barriers to effective voice modification is therefore limited. The research questions underlying this study have emerged within the first author's clinical work as an SLP providing gender-affirming voice therapy to voice clients whose presumed gender at birth is not congruent with the gender identity. The aim of this study was to explore TGD persons' views on voice and individual goals for voice modification and to relate these views to motives for undertaking gender-affirming voice therapy and possible client-perceived barriers for reaching a voice the client feels comfortable with. The insights gained from this study can serve to strengthen the common ground in the discussion between the SLP and the voice client on realistic and relevant therapy goals. A qualitative research approach was used to ensure that the findings would afford extending our understanding of TGD people's voice-related lived experiences and of their interpretations of those experiences (Erlingsson & Brysiewicz, 2017; Thorne et al., 1997).

#### Method

#### Study Design

An interview study was designed to include TGD persons diagnosed with gender dysphoria aiming for voice modification but with no previous experience of SLP gender-affirming voice therapy. Information material and the consent form were reviewed by a person diagnosed with gender dysphoria and with personal experience of gender-affirming voice therapy and were revised accordingly, prior to the recruitment of participants. A preliminary interview guide was developed based on the aim of this study and the authors' clinical and research experiences. Two pilot interviews were then conducted to test the interview guide, for example, in terms of comprehensibility and if it captured the aim of this study. The pilot interviews were not included in the analyzed material. Ethical approval for this study was obtained from the national ethical review authority (Case Number 2019-05374).

# Sampling and Participants

Participants were recruited from the waiting list for TGD persons referred by the Gender Identity Clinic to the Speech-Language Pathology Clinic of the University Hospital of Umeå. In accordance with Swedish national guidelines (The National Board of Health and Welfare, 2015), all participants had prior to their SLP referral received a diagnosis of gender dysphoria according to ICD-10 (World Health Organization, 1993). Other inclusion criteria were that the participants were adults (above 18 years of age), were native speakers of Swedish, had no previous experience of professional gender-affirming voice therapy, had no disorder or medical diagnosis that could affect hearing or perception of voices, and had no cognitive and/or language deficiency. After referral to the SLP clinic, persons who met the inclusion criteria were sent a written research participant information statement via mail, which was followed up over the telephone. On agreeing to participate in this study, the participant could choose to have their interview session immediately preceding the first appointment with an SLP (interviewer: J.H.) or on a separate occasion with another SLP.

Fifteen voice clients left their written consent to participate in this study. After the first nine interviews had been conducted, many themes were seen recurring and new interviews did not give new insights concerning the research questions. The age span (19–43 years) of the nine participants was, however, considered too narrow, and it was reasoned that persons with longer life experience might be able to enrich the material further. To extend the age range of the participants, the recruitment was expanded to also include two older clients from the Medical Unit Speech-Language Pathology at Karolinska University Hospital in Stockholm. Additionally, one participant who had been speaking Swedish for several years but who was not a native speaker of Swedish was included as part of the effort to extend the participant age range.

After a total of 15 interviews, the material was considered to have reached saturation. The age range of the 15 participants was 19–56 years with an average of 31.1 years. Five participants identified as men, one identified as masculine nonbinary, one identified as nonbinary, two identified as feminine nonbinary, four identified as women, one identified as agender, and one participant was unsure and still exploring their gender identity. Of the eight persons presumed male at birth, two had started

gender-affirming hormone therapy. Of the seven participants presumed female at birth, one had started hormone therapy with testosterone (see the Appendix). Three participants had previously seen an SLP for initial assessment and information, but no participant had, at the time of the interview, started gender-affirming voice therapy. Seven participants were in employment, five were students, two were on sick leave, and one was unemployed. In the result section, pseudonyms will be used when referring to individual participants.

# Data Collection From Semistructured Interviews

Individual semistructured interviews were conducted, following an interview guide with open-ended questions on participants' views on voice and voice modification. The questions were designed to capture the participants' perceptions of their own voices, gendered aspects of voice, expectations, and possible worries about engaging in gender-affirming voice therapy. Examples of the questions were, "What does the voice mean to you?"; "How do you perceive your voice?"; "How do you feel about your voice?"; "(When) do you perceive your voice to be an asset/obstacle?"; and "Do you have any expectations/goals/ possible concerns related to voice modification?" The interview guide allowed for flexibility and was designed to facilitate elaboration on questions of particular interest to the participants. Thirteen of the interviews were conducted at the SLP clinic of the University Hospital of Umeå. The two participants recruited from the Karolinska University Hospital were interviewed via the videotelephony software program Zoom (Zoom Video Communications, Inc.) due to the geographical distance. The interviews were between 37 and 68 min long (mean time = 56 min), recorded with external recording equipment (Marantz PMD660), and transcribed verbatim. All participants were interviewed by the same person.

#### **Analysis**

The interviews were transcribed by the interviewer (author J.H.) or by a research assistant. When the transcription work was performed by the research assistant (four transcripts), the interviewer checked the resulting transcripts to ensure content accuracy. The subsequent qualitative content analysis of the transcripts was performed in two steps. First, the transcripts were read several times to get a sense of the whole, and memos with initial analytical thoughts were written (Erlingsson & Brysiewicz, 2017; Thorne et al., 1997). In the second step, meaning units were identified. The MAXQDA 2020 software package (VERBI Software) was used to mark the meaning units in the transcripts, label them with codes, and do the initial sorting of codes into categories and themes. The validity of identified codes and categories as representations of the

participants' narratives was ensured by iteratively revisiting the original transcripts (Erlingsson & Brysiewicz, 2017; Graneheim & Lundman, 2004).

In the next step of the analysis, the transcripts were discussed with one additional researcher (author I.L.) to validate identified meaning units and the codes assigned to them (Elo & Kyngäs, 2008). The resulting categories and themes were then discussed by all four authors jointly to identify possible implications on SLP practices in gender-affirming voice therapy. All analysis steps were made on the Swedish transcripts of the interviews. Quotes were translated into English for this report by an accredited translator.

#### Results

We identified three themes and seven subthemes in the participants' narratives (see Table 1). In the first theme, "the incongruent voice setting the rules," the contribution of the voice on the experienced gender dysphoria is put in focus. The narratives highlight how an incongruent voice by the participants is perceived to condition both psychological well-being and acceptance in social situations. The second theme, "to reach a voice of my own choice," centers around anticipated personal gains using a modified voice and that learning to control the voice can assist in expressing one's true self. The third theme, "a voice out of reach," relates to worries and restricting factors for not reaching one's goals for voice modification. The themes and subthemes are presented in more detail below.

#### The Incongruent Voice Setting the Rules

"The importance of the voice is something that I have ... eh, that I have, how shall I put it, accepted, or perhaps rather stopped denying. And thus I have accepted the ... the type of ... gender dysphoria I have." (Marcus)

The contribution of the voice on the experienced gender dysphoria was evident in the interviews. The participants differed in whether they linked their dysphoric feelings primarily to how they themselves experience the voice or to the reactions and perceptions of others. However, the incongruent voice was perceived by the participants to affect both psychological well-being and participation in social life negatively. An incongruent voice was varyingly described as a barrier in communicative situations, making it hard for the person to take part in social life on equal terms with a conversation partner.

#### The Always Present Incongruent Voice

Participants' experiences of the voice having a negative effect on psychological well-being was one of the most clearly expressed consequences of an incongruent voice in the interviews. For the participant Fredrick, merely thinking of the voice can be enough to bring feelings of aversion:

"I feel equally bad when I'm on my own and feel that my voice is not right. It's not so much a matter of how other people perceive my voice. . . . It doesn't matter if I'm speaking or not—I feel [emphasis added] that my voice is bringing me down."

Hence, an increased well-being and "to become more comfortable with oneself," as Henri expressed it, were recurring goals for voice modification, indicating that an incongruent voice is an overtly expressed component of gender dysphoria for the participants. The feeling of having an incongruent voice was frequently described as the inner voice not being aligned with how the spoken voice is perceived by the speaker. However, the relational aspects of voice were also evident in the interviews and reveal the extent to which the incongruent voice affects daily life conversations with others. For some participants, being constantly aware of the voice when participating in conversations caused feelings of insecurity and frustration. Thinking of how the voice may be perceived by others can distract the speaker from the conversation taking place:

"... But I also think more about, like, how people perceive my voice when I'm talking to others. And this distracts me from what I'm trying to say." (Dani)

**Table 1.** Overview of the themes and subthemes identified in the interviews.

Theme	Subtheme
The incongruent voice setting the rules	The always present incongruent voice
	The voice acting as a gatekeeper
To reach a voice of my own choice	Reaching a voice under control
	A modified voice allows for being me
A voice out of reach	A demanding voice therapy
	Dealing with doubts from within and outside
	Lost in a modified voice

Expected benefits of a differently sounding voice were expressed as the gaining of increased self-confidence and becoming more comfortable when talking to people. "The relief of not having to think about the voice," as exemplified by Dani, was also expressed to be something that would make it easier to participate in social situations.

#### The Voice Acting as a Gatekeeper

The voice was regarded as an evident gender marker, for some participants even the most apparent one, and considered crucial for the first impression. Experiences among the participants of being read correctly until they start talking induce a feeling of the voice betraying them. As exemplified by Io,

"Of course, this makes me a little sad. But it also feels as if the illusion is somehow shattered. That I have, I don't know, been found out ... It's as if I managed to pass until they heard my voice."

The fear of being revealed by one's voice was in the interviews often seen in close conjunction with when the mismatch between voice and visual expression of gender identity (e.g., through the choice of clothes or hairstyle) was discussed. The voice is always present and always noticed by others, as well as in the sense that it cannot be hidden behind make-up or clothes:

"The voice is a give-away ... you can achieve a lot through the way you dress and your body—I mean patterns of movement and the like. But when you're having a conversation, all of that disappears." (Henri)

Hence, the voice acts as a gatekeeper, determining if the person is to be read in accordance with the gender identity, or if the gendered expression will be scrutinized and the speaker publicly exposed. A motive for modifying the voice was to reach a coherent whole, with voice and visual appearance equivalently aligned with the gender identity.

Having a voice that does not follow the expected gender norms was experienced to be problematic also for participants who are open with their gender dysphoria. Participants told about situations in which others keep insisting on misgendering the speaker or, in other ways, disregarding the speaker's gender identity. Andrea commented on the experience of being questioned when telling an acquaintance about the gender dysphoria:

"... 'but you're a guy, you have a masculine way of speaking, that deep kind of voice'—then it becomes very apparent that they're implying, sort of, 'What are you going to do about that?', and that it is

primarily my voice that makes people feel that something is wrong. It's as if they think I'm lying about my gender identity or that I'm not even trying to alter my voice."

Having one's gender identity being put in question by an incongruent voice could increase negative self-awareness within the speaker and lead to a shift of focus for both parties of a conversation, from the shared interest and responsibility for the communication to the speaker's norm-breaking vocal presentation. As expressed by Henri, a modified voice was seen to serve as a guarantee for "being correctly perceived, without having to explain." Other testimonies included situations in which the listener's reactions on the incongruent voice resulted in participants feeling they are not being acknowledged for who they are. Johanna told about her experience of the incongruent voice preventing her from being taken seriously and being understood in relation to her gender dysphoria:

"They know that my name is Johanna, and they don't associate that name with a female voice or a woman, simply because my voice is quite male. And they say 'Yes, but you don't sound...' They don't understand what I'm going through..."

Interviewer: "No. And how does that affect you, when you're feeling like that?"

Johanna: "I feel bad. I almost start crying. Because it doesn't [pause] I get very affected by the fact that they don't take me seriously."

Both Andrea's and Johanna's experiences show that listeners' reaction on the incongruent voice can result in feelings of their gender dysphoria and their transitioning not being understood or accepted. Hence, a voice that does not match the listeners' expectations of a feminine/ masculine voice disqualifies the speaker's gender identity and the strive after a gender expression in accordance with that identity. A modified voice was thus thought to serve to reach acceptance and an increased understanding of the TGD person's situation.

# To Reach a Voice of My Own Choice

"I think it will give me the power to choose my own voice instead of having the one that was kind of thrown upon me by genetics and life." (Bea, on voice therapy)

The voice was in the interviews expressed to be a prerequisite for being and acting in accordance with one's

true self, not only regarding vocal gender expression but also in expressing one's personality. To reach a voice that feels right was perceived to allow the speaker to have a greater sense of being appropriately represented in the communicative situation. Being able to choose an individual vocal gender expression and adjust that expression according to a specific situation presupposes an ability to control the voice.

#### Reaching a Voice Under Control

By controlling what the voice communicates, participants hoped to direct others' readings of the speaker. Being in control of one's vocal gender expression was also seen to make room for expressing one's true self. Nils said,

"All my life, people have seen me as something which I am not... and, well, people simply don't understand... But this [modifying the voice] is a way to confirm, or show, what I am, the way I am."

Gender-affirming voice therapy was expected to present a toolbox from which one can try out and find the most appropriate tools to build a voice that is congruent with both gender identity and personality. For other participants, however, getting in control of the voice was primarily related to a feeling of the voice being out of control:

"I guess what I feel is that I don't always have control of it [the voice], that it sometimes goes off track and into a pitch I don't like. Which perhaps to some extent can make me feel more uncomfortable with the way I speak..." (Dani)

Learning how to control the voice was thought to result in the person being more comfortable with taking part in conversations in general, including unprepared social situations where there might be a sudden request to speak.

#### A Modified Voice Allows for Being Me

Experiencing a mismatch between voice and gender identity was for some participants seen to result in less talking or even an avoidance of speaking situations. The choice not to speak can be seen related both to the feeling of alienation toward one's own voice and to not wanting others listening to one's voice. Patricia said,

"Even though I'm used to hearing my own voice, I guess I've always felt that it sounds wrong somehow ... which has made me, well, more reserved. I don't speak a lot. Even though there's a lot I would like to say, I'm reluctant to do so."

For Patricia, the expressed winnings of a modified voice would include reducing the avoidance of certain conversations at work and outside of work, making it easier to make new acquaintances. Hence, a more congruent voice was expected by the participants to lead to increased participation in social and working life.

Some of the participants told about their choice to adapt to a gender-normative communication style with speech and voice characteristics that did not necessarily correspond to their preferred expression but that were assumed to assist in being read in accordance with their gender identity. Gabriel, who after almost a year on testosterone is not misread as a woman anymore, told about his previous efforts to avoid what he sees as a feminine speaking style:

> "I wouldn't allow myself to be, like, feminine at all. ... But now I'm more comfortable with it because it doesn't matter that much anymore."

To reach a voice that is read in accordance with the gender identity was perceived to allow the speaker to somewhat depart from vocal gender norms. That is, when there is no risk in being misread, there is room for finding your personal expression, even if it means adapting some voice or communication stylistics commonly associated with another gender.

#### A Voice Out of Reach

"I think that, in my daily life, my voice, it's something I think about. Like, I'm not very comfortable with it. But at the same time ... I'm not very good at music, I don't have an ear for it, so I find it very difficult to do something about it. In any case, that's how it feels now, in advance." (Ellis)

All participants were referred to the SLP clinic by their own choice and with the stated aim of a voice in better alignment with their gender identity. However, many participants claimed not to know much about neither voice nor what voice therapy might entail. Expressed fears and worries were related both to the presumed difficulties with voice modification and to leaving a voice that is familiar to both the participants and their surroundings.

#### A Demanding Voice Therapy

A common view of gender-affirming voice therapy was that it is difficult and strenuous and a process that will take considerable time, effort, and energy. The assumed hardship of voice modification was the reason why Katarina previously has declined voice therapy:

"It feels as if this struggle to change my voice—it feels like that was the most difficult part of all in the transition. Like, the hardest, the most taxing part. And maybe that's why I opted out of it in the beginning, or, for quite a while."

Hence, engaging in voice therapy seems to be a well-considered decision, and the participants expressed a readiness to put in the work that is needed to reach a voice that they are more comfortable with. However, the willingness to invest time and effort was by some of the participants conditioned on reaching the desired results. Low self-discipline to get the voice training done was seen as another barrier for going through with the voice therapy, where difficulties with planning and initiating voice training at home can become an obstacle for reaching the set goals.

To have to put in work to achieve a modified vocal gender expression was by some of the participants described as unfair. The perception of unfairness can be related to the view of voice modification as demanding and something you are required to do. As expressed by Oscar, when comparing his (female sounding) voice to his (cisgender) boyfriend's voice:

"... but I think it's, well, unfair ... that his voice is kind of male. He doesn't even have to try ... It came naturally to him, so to speak, while, for me, something went wrong. Kind of feels like that."

The demanding gender-affirming therapy was thus seen as unfair in relation to cisgender people having a congruent voice from the start. However, the experience of unfairness is also mentioned in relation to other TGD persons for whom voice modification "seems so natural" (Patricia, on other transfeminine persons modifying their voices). Experiences of the need for voice modification as unfair, whether related to anticipated difficulties with voice therapy or to self-doubt about reaching one's goals for voice modification, may negatively affect motivation and voice therapy attainment. Another restricting aspect of importance for the SLP to be aware of is how voice training in itself was experienced as causing dysphoric feelings:

"... but at the same time, I can get dysphoric by practicing my voice. Or, like, if I get comfortable with articulating more femininely, and then I hear a recording of my voice, then I can feel really bad about it, and then I just stop doing it." (Bea)

If listening to one's own voice is distressing, spending much time on exploring the voice, and listening to and

comparing different vocal expressions may for some become too great an obstacle to overcome.

#### **Dealing With Doubts From Within and Outside**

Some participants expressed ambivalent feelings toward their choice to modify their vocal gender expression. This ambivalence was closely related to the speaker's view on vocal gender as strongly influenced by sociocultural norms on what a feminine/masculine voice should sound like:

"I don't think that norms make sense, at least not when it comes to gender. Because, I don't think it should matter. And yet, I follow quite a lot of norms for guys ... It feels a bit double standard to say that 'Yes, norms are crap' and then I, like, conform with them anyway." (Gabriel)

The participants who expressed conflicting feelings about conforming to vocal gender norms that they oppose motivated their choice to modify the voice by the increased well-being that is anticipated with a voice better aligned with the gender identity. Hence, the interviews illustrate how participants negotiate their expressed resistance to gender norms with their experienced need of increased well-being.

Participants also reflected on how a modified voice will be received by others. Some participants worried that the voice will not be accepted, for example, colleagues "finding it strange" if the voice suddenly sounds different (Patricia). Although being prepared that "the family might need some time to get used to the modified voice" (Henri), participants also wished for others to just accept the modified voice. Some participants had experiences of being questioned when using a different sounding voice. Johanna also expressed,

"People have sometimes asked me about it, I mean, why I was trying to sound like someone I'm not. This was before I came out as a woman, and then I would say things like 'I'm just fooling around a bit."

Participants told about the experience of others discouraging them to keep trying when not immediately succeeding to reach a voice that is read in accordance with gender norms. Hence, besides finding the inner motivation and strength to pursue a modified gendered expression in voice, participants also felt obliged to explain and defend an altered voice to others. The choice to pursue a different-sounding voice can thus be questioned both from within the person and by others. Worries about not reaching the voice one aims at can further increase the hesitation to engage in voice therapy. Cecilia expressed doubts about being able to reach the vocal gender expression she aimed for:

"My expectation is that people around me will perceive my voice as feminine. And my fear is that I might not quite achieve that. That I might not get the result I want."

Some participants were afraid of disappointing themselves if they are not able to reach a voice congruent with their gender. A slow progression could also result in the experience of voice therapy being of no use, leading the speaker to stop pursuing a voice change.

#### Lost in a Modified Voice

Participants expressed fears, and sometimes personal experiences, of the modified voice "sounding fake," as if "playing a role" (Io) or making a comic entry, where the voice is the joke:

"Yes, but I can actually make my voice sound a little darker, so if I could find a tool, I might be able to find a way to feel a little more comfortable in my voice instead of feeling that I'm faking my voice just for fun." (Oscar)

Several of the participants highlighted the need for the modified voice to feel authentic. The SLP was thought to provide the answers to what and how participants can do to reach this congruent, authentic voice.

Reaching a voice that is modified to a greater extent than the participant had wished for was yet another possible concern mentioned by the participants. Sounding too feminine was not so much related to sounding fake, as to posing a risk of the voice not being useful for serving the communicative needs of the speaker. Reflecting on other trans women for whom voice modification has resulted in decreased vocal intensity, Katarina expressed concerns about losing vocal power when aiming for a more highpitched voice. Other participants also worried about abandoning a well-functioning voice, for example, serving as an efficient tool for work-related communication, such as in teaching, as expressed by Marcus:

"When I have to tell my students to quieten down, how do I do that [in a darker voice]? I'm a little worried about that ... But I don't think I will have to raise my voice that much ... I mean, I am a valued colleague and well-liked by my pupils [pause] I don't want to ruin that by being interpreted differently. It would be unfortunate not to be able do my job as well as before."

Being concerned about how a more masculinesounding voice will affect the relationships with colleagues and pupils, Marcus believed a darker-sounding voice might need to be compensated for in certain communicative situations. Hence, to modify the voice in better alignment with the gender identity might result in the client having to address also other aspects of voice to reach an overall verbal expression representative of the individual and that meets the communicative requirements of the person's daily life.

#### **Discussion**

This study explored individual motives and concerns related to taking part in gender-affirming voice therapy among TGD persons diagnosed with gender dysphoria. The interviews show a variety of both supporting and restricting motivations for individuals considering voice modification and reflect the experienced impact of voice on the participants' daily life.

The participants described the vocal expression to be an important factor for the experienced gender dysphoria, with a negative impact on psychological well-being and participation in social life if the voice and gender identity do not match. The fact that the voice was strongly related to the gender dysphoria in the interviewed persons is not surprising, since the participants had been recruited after their referral to the SLP clinic and therefore could be assumed to experience some discomfort with their vocal gender expression. However, the observation is nevertheless informative as it highlights that the experience of an incongruent voice may be a potent factor behind gender dysphoria. Previous work by Davies et al. (2015) has suggested that a discrepancy between the sense of self and the outward vocal gender expression may be an amplifying factor for gender dysphoria and increased discomfort with one's gender presentation. Discomfort with a self-perceived incongruent voice has been acknowledged to reduce quality of life (Hancock et al., 2011; McNeill et al., 2008; Şirin et al., 2019; Watt et al., 2018). An incongruent voice has also been seen to have a restrictive effect on daily life activities, in which certain social contexts, such as conversations at work, with strangers, or over the telephone, can be especially demanding (Davies & Johnston, 2015; Pasricha et al., 2008). The interview findings have provided the groundwork for a deepened understanding of the communicative dissatisfaction (Pasricha et al., 2008) experienced by clients. The material relates experiences of being questioned and poorly understood, with associated feelings of alienation and humiliation discouraging the self-confidence and comfort related to verbal participation in social life. In Sweden, a diagnosis of gender dysphoria is needed for referral to SLP genderaffirming voice therapy (Södersten et al., 2015). However, the interview findings instead highlight the benefits of

providing professional support early on to reduce negative effects of an incongruent voice on well-being and participation in social life. To consider earlier access to SLP assessment and information is especially relevant, considering the extensive waiting periods experienced in most gender teams nationally.

Most participants related their dysphoric feelings about the voice to the discomfort of having a voice that does not fit their sense of self. For some participants, however, it is primarily the reactions of others to the voice that have a negative impact on psychosocial well-being and gender dysphoria. Reducing the risk of being misgendered was for these participants one of the most prevalent motives for modifying the voice. Taking part in social situations brought an almost constant awareness of the voice. A modified voice was therefore thought to reduce the stress stemming from being constantly aware of one's vocal expression. Concerns over how others perceive the voice have been observed previously (Dacakis et al., 2013; Davies & Johnston, 2015; Pasricha et al., 2008) to affect transgender persons' psychosocial well-being negatively. Focusing on others' perception of their voices has been seen to result in increased self-consciousness and constant monitoring of the voice (Davies & Johnston, 2015; Pasricha et al., 2008). When being read incorrectly due to an incongruent voice, the result may be increased frustration and distress (Dacakis et al., 2013; Pasricha et al., 2008). In agreement with previous research, this study confirms the relational aspects of voice, as self-perceived vocal expression and voice dysphoria are closely intertwined with others' perceptions and reactions to one's voice.

Norms on vocal gender were a recurring topic in the interviews and brought up by transfeminine, transmasculine, nonbinary, and agender participants. Testimonies of being questioned, even deliberately misgendered in situations where the participant tells about their trans experiences, indicate inability or unwillingness of others to acknowledge the person's gender identity. Participants' experiences adhere to previous research that illustrate how others impose a cisnormative view on others as their gender is seen as inherent, static, and binary (Kennedy, 2013). A normative and binary perspective was in the interviews also seen directly related to voice and communication, as participants told about being discouraged in their attempts to use a modified voice that does not meet the expected vocal gender norms. Most participants described the presence of vocal gender norms as complicating their participation in social life and contributing to their gender dysphoria. However, not all participants understood the gendered voice as representing stereotypes; some viewed the voice rather as an evident marker of biology and therefore something that the speaker needed to adjust to vocally present in better alignment with the gender identity. Regardless of

how participants felt about vocal gender norms, they tended to see them as something one needs to accept and, in some part, adjust to as norms are firmly rooted in society. Previous research has shown that aligning with, even overcompensating, gendered markers and behaviors can be a conscious choice that serves as "proof" of one's gender (Rubin, 2003, p. 167; see also Spade, 2006). To avoid being scrutinized, being questioned, and having your gender identity affirmed by others have been seen as incentives for conforming to gender norms (Rubin, 2003), even when norms are problematized as coercive and incongruent with the person's preferred gender expression (Linander et al., 2019). Since being read in accordance with the gender identity conditions how they are treated in society, individuals seem to negotiate their preferred alignment with gender norms (Linander et al., 2019; Rubin, 2003). For the participants in this study who felt ambivalent in aligning with gender norms they are opposing, voice modification was instead justified by anticipated increased wellbeing caused by a voice that is better aligned with their sense of self. Hence, participants negotiate their stance on gender norms to alleviate their gender dysphoria.

To reach an assurance of being in control of the voice is expressed in the interviews as an important part of the voice therapy. The wish for control was, however, connoted with a variety of meanings. Learning to control the voice was by some participants considered a prerequisite to being able to express one's true self. Hence, voice therapy was thought to provide the tools for showing who one is, with a vocal expression in alignment with not only gender identity but also personality. For other participants, the question of control was related to the experience of having "a voice out of control," where the uncertainty of not knowing what the voice will sound like when one starts to talk resulted in the avoidance of speaking situations. The expectation that increased vocal control will make the speaker more comfortable in social interactions was seen also in a study by Sönsterud et al. (2020), looking into motives for engaging in stuttering therapy. The emotional reactions associated with a self-perceived dissonance with, or dysfunction of, vocal communication can be connected with the identity-shaping properties of voice and speech. Gaining control over voice and speech was by the participants in our study thought to reduce anxiety and the need for constant awareness of the vocal output in social situations, with additional gains of increased comfort, self-confidence, and well-being.

#### Methodological Considerations

Qualitative content analysis was the methodological approach chosen for data analysis, as it offers a structured way to organize and summarize a large amount of text

(Erlingsson & Brysiewicz, 2017) into a condensed, yet broad, description of the data (Elo & Kyngäs, 2008). The method fits the purpose of this study since it is directed toward identifying similarities and differences within data, staying close to the participants' lived experiences (Graneheim et al., 2017).

The participants differ in age and gender identity, as well as in other ways that may impact the participants' experiences and perceptions on voice and voice modification, such as work experience and family conditions. However, they form a homogeneous group in race, ethnicity, and geosocial influences. Although the participants come from different parts of Sweden, all of them are white and most of them are born or now live in the northern parts of Sweden. All participants express gender dysphoria and have accepted an offer of SLP referral. Hence, although the described experiences in the interviews can be assumed to apply also to other persons diagnosed with gender dysphoria and who are considering gender-affirming voice therapy, other motives or experienced obstacles in modifying the voice can, of course, be present in other cultural contexts. It should also be mentioned that a wish to modify the voice may also be present in TGD persons who do not meet the criteria for a diagnosis of gender dysphoria, or, in other ways, face barriers for reaching an SLP referral, and whose experiences were therefore not represented in this study.

Voice clients with a diagnosis of autism spectrum disorder were not asked to participate in this study. This decision was made based on the need to recruit persons with intact auditory perception of voices. Studies have indicated that vocal pitch discrimination (Schelinski & von Kriegstein, 2019) and voice categorization (Lin et al., 2015) may be different in people with autism spectrum disorder, as compared to neurotypical individuals. While it is important to acknowledge the effects that differing auditory-perceptual abilities may have on an individual's motives for voice modification, this aspect was beyond the scope of this study to explore.

The presented subthemes and themes, and the implications drawn from these, are the results of how the interview material was analyzed and interpreted by, at first hand, the first author. The research questions this study aimed to explore originate from several years of working as an SLP providing gender-affirming voice therapy to TGD clients. Personal work experiences inevitably give a preunderstanding that cannot be disregarded during the analysis process. However, aiming for an analysis that does not go too "far from or into the data" (Sandelowski, 2000, p. 335) provided an analysis that lies close to the participants' narratives. Additionally, the different steps of analysis and the presented results have been subject to joint discussions among all coauthors. This process of triangulation in which the authors represent different areas of expertise and have various perspectives on voice and gender dysphoria increases trustworthiness as it lowers the degree of subjectivity in the analysis of the interview material and strengthens the validity of analysis codes, categories, and themes (Erlingsson & Brysiewicz, 2017; Graneheim & Lundman, 2004). Our understanding of the interview narratives could, however, likely have received additional depth by a first-person experience with voice dysphoria or a gender identity not reflected among the authors.

# **Conclusions and Clinical Implications**

This study explores views held by TGD voice clients who are considering gender-affirming voice therapy and reveals a range of both motivating and restraining factors for modifying the voice that are clinically important to consider. The variety of views on voice modification expressed by the participants highlights the need for person-centered voice therapy to start from the individuals' expressed needs and motives for modifying the voice yet also be affirmative of experienced hardship and anticipated difficulties related to voice modification. Based on the interviews, four aspects of particular importance for providing a person-centered gender-affirming voice therapy are emphasized.

Firstly, to find therapy goals that are relevant to the client, the SLP needs to provide time and space for clients to elaborate on their motives for voice modification. To give the client time and space to express experiences and thoughts on voice builds trust and an accepting climate in which the client can explore vocal expressions. The practice can thereby build a culturally competent care that is affirmative of the individual's wishes and prerequisites for voice modification (Smith, 2020). Starting from the clients' personal experiences of having a voice not aligned with their gender identity can assist the clinician in providing a voice therapy that is responsive to the client's goals that may vary between situations (Pasricha et al., 2008; Smith, 2020) and over time (Davies et al., 2015). Reaching a joint understanding of a client's view on voice and personal rationales for modifying the voice can also help form a common ground required for setting therapeutic goals that are well designed to benefit motivation and therapy goal attainment (Bandura & Locke, 2003; Sönsterud et al., 2019; van Leer, 2021).

Secondly, the clinician needs to create a confirming and supportive voice therapy environment where fears, worries, or other perceived obstacles can be expressed. The fear of being unsuccessful in modifying the voice can in itself be assumed to reduce self-confidence and prevent the client from exploring aspects of the voice. Building a

therapeutic alliance in which the client feels free to express doubts and fears about modifying the voice enables the SLP and client to identify individual barriers to voice modification (van Leer et al., 2008) and efficient strategies for overcoming such obstacles (Adler & Pickering, 2019). Exploring a client's self-efficacy before engaging in gender-affirming voice therapy can help the SLP to provide supportive tools (Dacakis et al., 2022) by which compliance and goal attainment can be scaffolded (Bandura & Locke, 2003; van Leer, 2021).

Thirdly, a person-centered approach should aim at empowering the TGD voice client with a feeling of being in control of the voice. The role of the SLP can, however, differ depending on whether the increased control is primarily gained by an enhanced control over, and understanding of, voice physiology or if it is more strongly related to the attainment of confidence to reach the preferred vocal gender expression. In the latter case, information on physiological and behavioral aspects of voice function provided by the SLP must be accompanied by the voice client being guide toward the preferred vocal gender expression. Active part-taking of the client when setting therapy goals further ensures a feeling of control. Additionally, the empowerment of the client can be beneficial for the client's self-confidence in the ability to reach the voice modification aimed for.

Lastly, cisnormativity and gender norms related to voice are discussed in the material. Gender norms influence the self-perception of voice, acting as both motivational and restricting factors for voice modification. The multifaceted and complex relationships between gender norms and motives for voice modification are highlighted by the breadth of experiences and attitudes represented in the interviews. For the SLP, it is important to be aware of potentially ambivalent feelings concerning voice modification, as they can present mental or emotional barriers to exploring different aspects of the voice and, hence, prevent the client to reach a voice that matches the individual's sense of self. Carryover of the modified voice into daily conversations can also be assumed to be more difficult if the client is hesitant or has feelings of guilt for maintaining and reinforcing vocal gender norms. Therefore, the SLP needs to be knowledgeable about the influence of vocal gender norms to understand the client's strategy in goal setting or performance in therapy and to develop cultural competence needed to provide a therapeutic climate of acceptance and cooperation (Hancock, 2015). However, the SLP should also be aware of cisnormative practices within one's profession (Kennedy, 2013), as well as one's own understanding of vocal gender. Reflecting on how one chooses to present voice therapy to the client decreases the risk of reproducing gender norms in the therapeutical context. To apply a norm-critical and

person-centered approach within SLP practices affirms the client's sociocultural positionings and preferred presentation and can support well-being in TGD voice clients (Azul et al., 2022).

# **Data Availability Statement**

The data sets analyzed during this study can be made available from the corresponding author on reasonable request.

# **Acknowledgments**

The authors would like to thank the participants of this study for generously sharing their experiences.

#### References

- Adler, R. K., & Pickering, J. (2019). The role of the SLP in counseling. In R. K. Adler, S. Hirsch, & J. Pickering (Eds.), Voice and communication therapy for the transgender/gender diverse client: A comprehensive clinical guide (3rd ed.). Plural.
- **Azul, D.** (2015). Transmasculine people's vocal situations: A critical review of gender-related discourses and empirical data. *International Journal of Language & Communication Disorders*, 50(1), 31–47. https://doi.org/10.1111/1460-6984.12121
- **Azul, D.** (2016). Gender-related aspects of transmasculine people's vocal situations: Insights from a qualitative content analysis of interview transcripts. *International Journal of Language Communication Disorders*, *51*(6), 672–684. https://doi.org/10.1111/1460-6984.12239
- Azul, D., Arnold, A., & Neuschaefer-Rube, C. (2018). Do transmasculine speakers present with gender-related voice problems? Insights from a participant-centered mixed-methods study. *Journal of Speech, Language, and Hearing Research, 61*(1), 25–39. https://doi.org/10.1044/2017\_JSLHR-S-16-0410
- Azul, D., Hancock, A. B., Lundberg, T., Nygren, U., & Dhejne, C. (2022). Supporting well-being in gender-diverse people: A tutorial for implementing conceptual and practical shifts toward culturally responsive, person-centered care in speechlanguage pathology. American Journal of Speech-Language Pathology, 31(4), 1574–1587. https://doi.org/10.1044/2022\_AJSLP-21-00322
- Azul, D., Nygren, U., Södersten, M., & Neuschaefer-Rube, C. (2017). Transmasculine people's voice function: A review of the currently available evidence. *Journal of Voice*, 31(2), 261.e9–261.e23. https://doi.org/10.1016/j.jvoice.2016.05.005
- **Bandura, A., & Locke, E. A.** (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*, 88(1), 87–99. https://doi.org/10.1037/0021-9010.88.1.87
- Coleman, E., Radix, A. E., Bouman, W. P., Brown, G. R., de Vries, A. L. C., Deutsch, M. B., Ettner, R., Fraser, L., Goodman, M., Green, J., Hancock, A. B., Johnson, T. W., Karasic, D. H., Knudson, G. A., Leibowitz, S. F., Meyer-Bahlburg, H. F. L., Monstrey, S. J., Motmans, J., Nahata, L., ... Arcelus, J. (2022). Standards of care for the health of transgender and gender diverse people, version 8. *International*

- Journal of Transgender Health, 23(Suppl. 1), S1–S259. https://doi.org/10.1080/26895269.2022.2100644
- Dacakis, G., Davies, S., Oates, J. M., Douglas, J. M., & Johnston, J. R. (2013). Development and preliminary evaluation of the transsexual voice questionnaire for male-to-female transsexuals. *Journal of Voice*, 27(3), 312–320. https://doi.org/10.1016/j.jvoice.2012.11.005
- Dacakis, G., Erasmus, J., Nygren, U., Oates, J., Quinn, S., & Södersten, M. (2022). Development and initial psychometric evaluation of the self-efficacy scale for voice modification in trans women. *Journal of Voice*. Advance online publication. https://doi.org/10.1016/j.jvoice.2022.03.015
- Davies, S., & Goldberg, J. M. (2006). Clinical aspects of transgender speech feminization and masculinization. *International Journal of Transgenderism*, 9(3–4), 167–196. https://doi.org/10.1300/J485v09n03\_08
- Davies, S., & Johnston, J. R. (2015). Exploring the validity of the transsexual voice questionnaire for male-to-female transsexuals. Canadian Journal of Speech-Language Pathology and Audiology, 39(1), 40–51.
- Davies, S., Papp, V. G., & Antoni, C. (2015). Voice and communication change for gender nonconforming individuals: Giving voice to the person inside. *International Journal of Transgenderism*, 16(3), 117–159. https://doi.org/10.1080/15532739.2015. 1075931
- **Elo, S., & Kyngäs, H.** (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x
- Erlingsson, C., & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. African Journal of Emergency Medicine, 7(3), 93–99. https://doi.org/10.1016/j.afjem.2017.08.001
- Graneheim, U. H., Lindgren, B. M., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*, 56, 29–34. https:// doi.org/10.1016/j.nedt.2017.06.002
- **Graneheim, U. H., & Lundman, B.** (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112. https://doi.org/10.1016/j.nedt.2003.10.001
- **Hancock**, **A. B.** (2015). The role of cultural competence in serving transgender populations. *SIG 3 Perspectives on Voice and Voice Disorders*, 25(1), 37–42. https://doi.org/10.1044/vvd25.1.37
- Hancock, A. B., Krissinger, J., & Owen, K. (2011). Voice perceptions and quality of life of transgender people. *Journal of Voice*, 25(5), 553–558. https://doi.org/10.1016/j.jvoice.2010.07.013
- Kennedy, N. (2013). Cultural cisgenderism: Consequences of the imperceptible. Psychology of Women Section Review, 15(2), 3–11.
- Leyns, C., Alighieri, C., de Wilde J., van Lierde K., T'Sjoen, G., & D'haeseleer, E. (2022). Experiences of transgender women with speech feminization training: A qualitative study. Healthcare, 10(11). https://doi.org/10.3390/healthcare10112295
- Leyns, C., Papeleu, T., Tomassen, P., T'Sjoen, G., & D'haeseleer, E. (2021). Effects of speech therapy for transgender women: A systematic review. *International Journal of Transgender Health*, 22(4), 360–380. https://doi.org/10.1080/26895269.2021. 1915224
- Lin, I. F., Yamada, T., Komine, Y., Kato, N., Kato, M., & Kashino, M. (2015). Vocal identity recognition in autism spectrum disorder. *PLOS ONE*, 10(6), Article e0129451. https://doi.org/10.1371/journal.pone.0129451
- **Linander, I., Alm, E., Goicolea, I., & Harryson,** L. (2019). "It was like I had to fit into a category": Care-seekers' experiences of gender regulation in the Swedish trans-specific healthcare. *Health, 23*(1), 21–38. https://doi.org/10.1177/1363459317708824

- McNeill, E. J., Wilson, J. A., Clark, S., & Deakin, J. (2008). Perception of voice in the transgender client. *Journal of Voice*, 22(6), 727–733. https://doi.org/10.1016/j.jvoice.2006.12.010
- Mészáros, K., Csokonai Vitéz, L., Szabolcs, I., Góth, M., Kovács, L., Görömbei, Z., & Hacki, T. (2005). Efficacy of conservative voice treatment in male-to-female transsexuals. Folia Phoniatrica et Logopaedica, 57(2), 111–118. https://doi.org/10.1159/000083572
- Nygren, U., Nordenskjold, A., Arver, S., & Södersten, M. (2016). Effects on voice fundamental frequency and satisfaction with voice in trans men during testosterone treatment—A longitudinal study. *Journal of Voice*, 30(6), 766.e23–766.e34. https://doi.org/10.1016/j.jvoice.2015.10.016
- Oates, J. (2019). Evidence-based practice in voice training for trans women. In R. K. Adler, S. Hirsch, & J. Pickering (Eds.), Voice and communication therapy for the transgender/gender diverse client: A comprehensive clinical guide (3rd ed.). Plural.
- Oates, J., & Dacakis, G. (2015). Transgender voice and communication: Research evidence underpinning voice intervention for male-to-female transsexual women. SIG 3 Perspectives on Voice and Voice Disorders, 25(2), 48–58. https://doi.org/10.1044/vvd25.2.48
- Pasricha, N., Dacakis, G., & Oates, J. (2008). Communicative satisfaction of male-to-female transsexuals. *Logopedics Phoniatrics Vocology*, 33(1), 25–34. https://doi.org/10.1080/ 14015430701514500
- Pickering, J., & Greene, M. (2019). Voice and communication modification: Historical perspective. In R. K. Adler, S. Hirsch, & J. Pickering (Eds.), Voice and communication therapy for the transgender/gender diverse client: A comprehensive clinical guide (3rd ed.). Plural.
- Quinn, S., Oates, J., & Dacakis, G. (2022). Perceived gender and client satisfaction in transgender voice work: Comparing self and listener rating scales across a training program. *Folia Phoniatrica et Logopaedica*, 74(5), 364–379. https://doi.org/10. 1159/000521226
- Rubin, H. (2003). Self made men: Identity, embodiment, and recognition among transsexual men. Vanderbilt University Press. https://doi.org/10.2307/j.ctv17vf6c0
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health*, 23(4), 334–340. https://doi.org/10.1002/1098-240x(200008)23:4<334::aid-nur9>3.0.co;2-g
- Schelinski, S., & von Kriegstein, K. (2019). The relation between vocal pitch and vocal emotion recognition abilities in people with autism spectrum disorder and typical development. *Journal of Autism and Developmental Disorders*, 49(1), 68–82. https://doi.org/10.1007/s10803-018-3681-z
- Smith, C. J. (2020). Culturally competent care for transgender voice and communication intervention. *Perspectives of the* ASHA Special Interest Groups, 5(2), 457–462. https://doi.org/ 10.1044/2020\_PERSP-19-00117
- Södersten, M., Nygren, U., Hertegård, S., & Dhejne, C. (2015). Interdisciplinary program in Sweden related to transgender voice. SIG 3 Perspectives on Voice and Voice Disorders, 25(2), 87–97. https://doi.org/doi:10.1044/vvd25.2.87
- Sönsterud, H., Feragen, K. B., Kirmess, M., Halvorsen, M. S., & Ward, D. (2020). What do people search for in stuttering therapy: Personal goal-setting as a gold standard? *Journal of Communication Disorders*, 85, Article 105944. https://doi.org/10.1016/j.jcomdis.2019.105944
- Sönsterud, H., Kirmess, M., Howells, K., Ward, D., Feragen, K. B., & Halvorsen, M. S. (2019). The working alliance in stuttering treatment: A neglected variable? *International*

- Journal of Language & Communication Disorders, 54(4), 606-619. https://doi.org/10.1111/1460-6984.12465
- Spade, D. (2006). Mutilating gender. In S. Stryker & S. Whittle (Eds.), The transgender studies reader (pp. 315-332). Routledge. https://doi.org/10.4324/9780203955055
- The National Board of Health and Welfare. (2015). God vård av vuxna med könsdysfori - Nationellt kunskapsstöd [Care of adults with gender dysphoria - National guidelines]. https:// www.socialstyrelsen.se/globalassets/sharepoint-dokument/ artikelkatalog/kunskapsstod/2015-4-7.pdf
- Thorne, S., Kirkham, S. R., & MacDonald-Emes, J. (1997). Interpretive description: A noncategorical qualitative alternative for developing nursing knowledge. Research in Nursing & Health, 20(2), 169-177. https://doi.org/10.1002/(sici)1098-240x(199704)20:2<169::aid-nur9>3.0.co;2-i
- van Leer, E. (2021). Enhancing adherence to voice therapy via social cognitive strategies. Seminars in Speech and Language, 42(1), 19-31. https://doi.org/10.1055/s-0040-1722755

- van Leer, E., Hapner, E. R., & Connor, N. P. (2008). Transtheoretical model of health behavior change applied to voice therapy. Journal of Voice, 22(6), 688-698. https://doi.org/10.1016/ j.jvoice.2007.01.011
- Watt, S. O., Tskhay, K. O., & Rule, N. O. (2018). Masculine voices predict well-being in female-to-male transgender individuals. Archives of Sexual Behavior, 47(4), 963-972. https:// doi.org/10.1007/s10508-017-1095-1
- World Health Organization. (1993). The ICD-10 classification of mental and behavioural disorders.
- Ziegler, A., Henke, T., Wiedrick, J., & Helou, L. B. (2018). Effectiveness of testosterone therapy for masculinizing voice in transgender patients: A meta-analytic review. International Journal of Transgenderism, 19(1), 25-45. https://doi.org/10. 1080/15532739.2017.1411857
- Zimman, L. (2012). Voices in transition: Testosterone, transmasculinity, and the gendered voice among female-to-male transgender people [Doctoral dissertation, University of Colorado].

#### **Appendix**

#### **Participants**

- 1. Andrea (20–25 years old) identifies as feminine nonbinary, has not started gender-affirming hormone therapy (GAHT). Wants to reach a somewhat more feminine-sounding voice.
- 2. Bea (20-25 years old) identifies as feminine presenting nonbinary, has been on GAHT for a year. Wants the voice to be read as feminine.
- 3. Cecilia (30-35 years old) identifies as woman, has not started GAHT. Wants to reach a voice that feels right and that is perceived by others as feminine.
- Dani (20-25 years old) identifies as agender, do not want GAHT. Would prefer if the voice did not express gender at 4. all, wants to explore the voice and learn how to avoid a too high-pitched voice.
- 5. Ellis (20–25 years old) is uncertain of the gender identity, is not on GAHT. Wants the voice to sound brighter.
- 6. Fredrick (18-20 years old) identifies as man, has not started GAHT. Wants to modify the voice to ease the gender dysphoria.
- 7. Gabriel (18-20 years old) identifies as man, is on GAHT since almost a year. Has asked for an SLP referral because of concerns over being "revealed" due to voice instability.
- 8. Henri (20-25 years old) identifies as nonbinary masculine, is not on GAHT. Wants to reach a more masculine sounding voice, to be perceived correctly by others.
- 9. lo (25-30 years old) identifies as nonbinary, is not on GAHT. Wants to reach a more feminine-sounding voice but prefers a voice that is perceived neither as a man's voice, nor a woman's voice.
- 10. Johanna (40-45 years old), identifies as woman, has not started GAHT. Wants a more congruent voice to improve well-being.
- Katarina (55-60 years old) identifies as woman, has been on GAHT for 1.5 years. Wants the voice to be aligned with 11. the overall gendered expression.
- 12. Marcus (35–40 years old), identifies as man, has not started GAHT. Wants a darker sounding voice.
- 13. Nils (50-55 years old) identifies as man, is not on GAHT. Wants to explore the voice in a masculine direction.
- 14. Oscar (30-35 years old) identifies as man, is not on GAHT. Wants to try out voice therapy to see if a more masculine sounding voice can be reached.
- 15. Patricia (45-50 years old) identifies most often as woman but sometimes as nonbinary, has not started GAHT. Wants to reach a more feminine-sounding voice that matches the inner voice and sense of self.