Title: Expanding the evidence: Developments and innovations in clinical practice, training and competency within voice and communication therapy for trans and gender diverse people

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Expanding the evidence: Developments and innovations in clinical practice, training and competency within voice and communication therapy for trans and gender diverse people.

ABSTRACT

Background: Speech and language therapists (SLTs) deliver voice and communication therapy for trans and gender diverse people to facilitate authentic vocal and communicative expression. Davies, Papp and Antoni (2015) have provided a comprehensive review of the literature, with recommendations for good clinical care. Several areas highlighted as gaps in the research were identified by the current authors as ones where evidence is expanding.

Aims: To demonstrate 1) an expansion of the evidence base in particular innovations in voice group therapy for trans women and trans men; 2) the importance of delivering voice and communication therapy as part of a complete approach to trans and gender diverse health care; and 3) Developments in training and competency in the UK.

Method: Data was drawn from three small-scale projects, two surveys and one audit.

Measurements: Data from survey and audits and pre- and post-group acoustic measures of and client self-perceptual measures, including the Transsexual Voice Questionnaire (TVQ^{MtF}); a client-generated set of questions for trans men; and the *migration of vocal identity map*, adapted from Narrative Therapy practices.

*Results***:** Positive outcomes for both pitch measures and client perception were recorded. Audit and survey data provided evidence of developments in training and competency in the UK.

Conclusion: Evidence supports group therapy as a successful approach for trans individuals across a number of parameters of voice and self-perception. Voice group protocols for both trans men and trans women should take account of the social context within which to explore relational presence and authentic voice. SLTs within Gender Identity Clinics provide voice and communication as part of a broader pathway of care, alongside sharing professional knowledge and skills. Current UK developments are documented as indicators of positive responses to the growth in the number of SLTs seeking to develop specialist skills within this field.

KEYWORDS. voice–communication–group-therapy–authenticity-identity-competency

Voice and communication interventions delivered by speech and language therapists (SLTs) are increasingly being shown as helpful for transgender and gender diverse people in achieving congruence with the individual's internal sense of gender identity (Dacakis, Oates & Douglas, 2012; Gelfer & Tice, 2013; Meszaros et al. 2005; Van Borsel et al., 2009). Transgender and gender diverse people may seek assistance to modify – feminise, masculinise or in some senses neutralise – voice and communication (Davies & Goldberg, 2006; Mills & Stoneham, 2016) and an increased comfort in gender expression can help reduce gender dysphoria and positively impact upon mental health and quality of life (Gelfer & Tice, 2013; Hancock & Garabedian, 2013; Hancock, Krissinger & Owen, 2010). Indeed, gender incongruence in voice is distressing for transgender and gender diverse people as it erodes self-conceptualisation (Dacakis, Oates & Douglas, 2016). Furthermore, experiencing a hetero-cis-normative world view significantly contributes to feelings of shame and stigma (Dundas, 2016;

Worthen, 2016). The body of literature in voice and communication therapy is evolving, notably in the last ten years, though studies tend to involve small numbers of participants and lack control groups (Oates, 2012). The World Professional Association for Transgender Health (WPATH) develops supportive policies to ensure standards of care for trans and gender variant people. In their companion document for the Standing Committee for Voice and Communication, Davies, Papp and Antoni (2015) present a comprehensive and detailed review of the literature in order to guide best clinical practice and stimulate areas of research in which there currently remains a significant paucity. From their wide-ranging summaries and recommendations, the following are highlighted as warranting further investigation:

- Goals and outcomes are moving beyond acoustic data and increasingly incorporate client perception of their voice in the context of their lives (p.119);

- Change as a process is important in voice feminisation (pp.130; 132);

- Voice and communication therapy conducted in groups can be advantageous to individuals in voice feminisation (p.132);

- Voice and communication therapy needs to be offered within a complete approach which includes primary care and addresses social and psychological issues (p.125);

- There are no established protocols for voice masculinisation and there is a paucity of studies related to voice and communication therapy for trans men (pp.143; 150);

- All voice and communication professionals should have a basic understanding of, and sensitivity to, issues in transgender care (p.125).

In considering the above, there is current evidence of innovation and development in the UK in three overarching areas as a direct response to a significant increase in referral rates and the level of client need, and it is these 3 areas that form the aims of the current paper:

1) *expansion of the evidence base in clinical practice, in particular innovations in voice group therapy for trans women and trans men in the trans care pathway*. This paper explores most notably the function of group identity and cohesion, the development of a protocol for voice and communication group therapy for trans men, and the development of client lived narratives as outcome measures.

2) *delivering voice and communication therapy as part of a complete approach to trans and gender diverse health care including the role of speech and language therapy within a gender specialist multi-disciplinary team*.

3) *developments in training and competency in the UK*: This paper documents the development of the *Trans and Gender Diverse Voice and Communication Therapy Competency Framework* by the Royal College of Speech and Language Therapists (RCSLT) and current provision of trans voice and communication content in UK SLT programme curricula.

1. *INNOVATIONS IN VOICE GROUP THERAPY FOR TRANS WOMEN AND TRANS MEN IN THE TRANS CARE PATHWAY*

Group therapy in a broad sense includes not only group psychotherapy but facilitative, learning processes which take place within a group setting (Montgomery, 2002). SLTs have experience in delivering support and skills-training groups, focusing on a wide range of speech, language and communication (SLC) needs, for example for people with aphasia, Parkinson's disease, and those who stammer or have a voice disorder. SLTs may go on to acquire post-registration training in a range of psychological approaches including group therapy and group process as part of their clinical development (Cheasman, Everard & Simpson, 2013). It is known that the significant experience of shame from external or internalised transphobia can lead trans and gender diverse people to withdraw from social participation (Dundas, 2016). As a result of the stressors from being a minority group, trans people tend to expect more social prejudice and rejection which requires resilience and coping mechanisms to navigate (Hendricks & Testa, 2012). However, creating a within-group identity facilitates a positive self-concept and counteracts stigma (Myers, 2003). The group setting is a place of being seen and being heard, and therefore facilitates attitudinal and behavioural change to self and others. Voice group programmes such as Shelagh Davies' *Changing Keys* (reported in Davies & Goldberg, 2006) provide opportunities for client education, skills development, and support and discussion. Indeed, evidence is emerging that voice group therapy is successful for trans and non-binary individuals across parameters of voice modification, self-efficacy, communicative confidence and self-acceptance because people discover the value of group and task cohesion, and a sense of belonging. This provides a safe space within which to explore direction of travel to the vocal unknown (Mills & Stoneham, 2017a).

The West of England Specialist Gender Identity Clinic: Using singing within voice group therapy

Evidence for the use of singing groups within healthcare is emerging, both from music therapy and within singing for the brain (Bannan & Montgomery-Smith, 2008; Bunt & Stige 2014). A small-scale project was carried out to investigate the benefits of singing in group work for trans women. Mithen (2005) stated that, far from being simply a leisure activity, music is integral to human social life. Within healthcare, Bunt and Stige (2014) explore how music therapy group work facilitates different learning and insights from others' behaviour and perspectives. In this way, an individual's own habits can be explored within an environment of trust in which different behaviours can be tried. These authors report that 'taking risks for some people may be easier in a musical rather than a verbal medium' (2014, p.28), with individuals learning together through listening and imitating. Within this context, it was hypothesised that a voice group for trans women that incorporated singing would demonstrate similar outcomes and that there would be transferable benefits for spoken voice feminisation. In addition, the involvement of a small group of cross-year speech and language therapy students provided a context for clients to work in partnership with those who were *also* in the process of learning about their own voice and inexperienced in the clinical application of particular voice techniques.

10 participants identifying as trans women (age range 21-62yrs) attended the eight-week programme along with four cross-year speech and language therapy students. Sessions of three hours each were led jointly by a choir director and specialist SLT, both trained in the Estill voice model (Steinhauer, McDonald Klimek & Estill, 2017). All trans women received an initial assessment session with the specialist SLT, and some had previous limited voice feminisation therapy input. The study involved a mixed methodology: objective measures of reading fundamental frequencies (RFF) pre- and post-group, using *The Rainbow Passage* (Fairbanks, 1960). Pre- and post- group pitch measures of /a:/ and a nasal siren ('miren') were recorded using Praat, a computer programme for recording and analysing speech (Boersma and Weenik, 2017). The nasal siren was considered useful in investigating pitch range following singing training, although it was hypothesised that qualitative self-assessment would yield the most useful data. Participants also completed qualitative self-evaluation using the TVQ[MtF] (Dacakis & Davies, 2012). Finally, a focus group was conducted post-course by an external specialist voice SLT.

Structure included:

- Voice education, including introduction to speech quality, falsetto (laryngeal tilt) and smooth (simultaneous) voice onsets; resonance and tongue position; managing deconstruction;

- Singing voice activities using a range of songs rehearsed and recorded for practice;

- Spoken voice activities taking pitch, resonance and intonation from singing into speech tasks and conversation;

- SLT students being integrated into all singing activity, providing supervised coaching and feedback of spoken voice activities;

- Concepts of authenticity and presence, for example using pause and stillness, were introduced through both singing and spoken voice, with a particular focus on using natural voice and managing performance anxiety.

Coaching and feedback to notice sensation and repeat with modification of an aspect of voice quality facilitated self-efficacy. Attendance was close to 100%, with only three separate absences during the eight week programme due to illness or personal circumstance. For results see Table 1.

Modality	Pre-programme group mean in Hz	Post-programme group mean in Hz
The Rainbow Passage RFF F_0	147.6 $\rightarrow$	158.1
'miren' mean pitch	228.9 $\rightarrow$	280.5
highest pitch achieved in 'miren'	367.9 $\rightarrow$	434.8

Table 1: *The West of England GIC voice group pre- and post- pitch measures (mean Hz)*

The results from the TVQ^{MtF} Self-Assessment Questionnaire were as follows. All 10 participants (100%) rated themselves more favourably post-programme on the following question: Q4 (*The pitch of my speaking voice is too low*); eight participants rated themselves more favourably post-programme on the following three questions: Q11 (*When I speak the pitch of my voice doesn't vary enough*), Q10 (*My voice makes it hard to be identified as a woman less often*) and Q16 (*I feel frustrated with trying to change my voice*). Seven participants rated themselves more favourably post-programme on the following four questions: Q5 (*The pitch of my voice is unreliable*), Q24 (*I feel my voice does not reflect the true me*)**,** Q27 (*My voice 'gives out' in the middle of speaking*) and Q17 (*My voice difficulties restrict my social life*). Five participants made positive shifts in self-rating for 18 or more of the 30 questions.

A post-programme focus group discussion was audio-recorded and thematic analysis of data supported the positive shifts in self-assessment outlined above. Participants' comments were grouped into

four themes: group singing, working in partnership with student SLTs, voice education, and voice practice. The benefits of group therapy reflected Yalom & Leszcz's (2005) psychotherapeutic group benefits explored further below. Participants specifically reported that the singing within the group lifted mood and promoted camaraderie, and that the anonymity of group singing enabled participants to use voice more spontaneously and manage anxiety, including within a final performance to a small, invited audience. Participants reported the value of shared learning and commented that working in partnership with SLT students was invaluable. Not only did this provide more 1:1 and group support, but seeing the students themselves struggle in practicing voice techniques normalised anxiety and what were perceived as 'mistakes'. Working together was described as more inclusive, reducing the feeling of 'us and them' in that everyone was learning about themselves and their voices. Interestingly, a recent survey of SLTs working in trans voice and communication (N=30) included 11/30 (37%) respondents reporting that they use singing as a way of continuing development of their own therapeutic voice skills (see section 3).

Charing Cross Gender Identity Clinic Voice Group Protocol

The model of service delivery for voice feminisation at the *Charing Cross* Gender Identity Clinic, London, commences with individual therapy sessions. These facilitate client-acceptable pitch, resonance, intonation and voice quality modification in reading and simple speaking task hierarchies, progressing to a group treatment format for more cognitively loaded vocal tasks, social communication and integration of authentic voice (Mills, 2015). A service evaluation was undertaken of the voice group programme involving seven voice groups between 2010-2014 for 58 participants who identified as trans women. Participant mean age was 41.7 years with age range 24-68 years. Individuals received a *maximum* of 10 one-to-one hourly sessions, then six two-hourly voice groups held at monthly intervals. A mean of 5.2 one-to-one sessions were attended pre-group; a mean of 5.6 group sessions were attended, with 63.8% of participants attending all 6 group sessions. In addition, all participants received a post-group review.

The programme content evolved in response to client evaluation and feedback, and in development of clinical practice, but the overarching aim remained to assist clients in the generalisation and integration of vocal and communicative skills in a social context towards individual gender comfort and psychosocial function. The voice group programme protocol is as follows:

- voice skills practice '*tuning in and tuning up*' (Mills & Stoneham, 2017a);

- voice projection skills and speaking with heightened emotion (Rodenburg, 2009);

- speaking on the telephone workshop and role-play (Mills & Stoneham, 2017a);

- public speaking skills, Speaking Circles (Glickstein, 1998) and developing relational presence and authenticity (Rodenburg, 2007);

- advice, sharing, problem-solving, giving and receiving constructive feedback;

- check ins, check-outs, stories of achievement, reflections on learning (Logan, 2013; Mills & Stoneham, 2017a).

The study involved a mixed methodology: objective measures of reading fundamental frequencies (RFF) and speaking fundamental frequencies (SFF) were taken at initial assessment, at the end of one-to-one sessions (pre-group), and post-group sessions, using *The Rainbow Passage* (Fairbanks, 1960) for reading, and two-minute free-speech monologue on a hobby, description of a journey, description

of vocal goals / achievements and learning (for post-group re-test); and a qualitative questionnaire about how participants felt about their vocal practice and development and what they had gained from being in a group, and review interviews. Results were as follows.

Modality	Initial in Hz	Pre-Group in Hz	Post-Group in Hz	Post-Group Range in Hz
The Rainbow Passage RFF mean F_0	135.7 →	179.8 →	194.93	148-250
SFF mean F_0	124.8 →	154 →	177.5	148-223

Table 2: *Charing Cross GIC voice groups pitch measures at initial, pre- and post- group (in Hz)*

A paired t-test was performed to determine if the group was effective in raising reading pitch. The mean reading pitch (M=14.91, SD=21.45, N=58) was significantly greater than zero, t(57)=-5.295, two-tail p<0.01, providing evidence that the group is effective in raising mean reading pitch. A 95% CI about mean reading pitch is (9.27, 20.56). A paired t-test was performed to determine if the group was effective in raising speaking pitch. The mean speaking pitch (M=24.36, SD=20.86, N=58) was significantly greater than zero, t(57)= -8.893, two-tailed p<0.01, providing evidence that the group is effective in raising mean speaking pitch. A 95% CI about mean speaking pitch is (18.87, 29.84).

The questionnaire, piloted and developed in-house, asked what participants had gained from the group – what aspects had been most useful and of value; the amount of voice practice participants felt they had received; whether they would recommend the group to others service users. The results were: 100% of participants stated they would recommend the group to other service users. 54/58 (93%) stated that they received 'all the practice and information' they required; 2/58 (3.5%) stated that they received 'some' and the other 2/58 (3.5%) stated 'even more than expected'. Thematic analysis of questionnaire responses and post-group review interviews were conducted and considered with reference to Yalom's *therapeutic factors*, originally derived from therapy values correlated with patient outcome, and a model of group psychotherapy (Yalom & Leszcz, 2005). These will be discussed in the following section.

The Function of Group Identity and Cohesion as a Catalyst for Voice and Communication Change

The first and second authors presented the *Charing Cross* and *West of England GIC* group outcomes and analysis independently in 2015, at the 1st European Professional Association for Transgender Health (EPATH) Conference (Mills, 2015; Stoneham, 2015) but the similarities were striking. Thematic analysis from both *Charing Cross* (questionnaires and review interviews) and *West of England GIC* (post-programme focus group discussion) were formulated using the Yalom & Leszcz (2005) model.

We give examples of client feedback framed within Yalom's *therapeutic factors* as evidence of the clients' growth process towards behavioural and attitudinal change, gender comfort and sense of individual well-being primarily as a result of group cohesiveness (see Marmarosh, Holtz & Schottenbauer, 2005). Reference is not made to the *corrective family re-enactment* factor since the voice groups are not psychodynamic psychotherapy groups.

- *Universality* (commonality and shared experiences reducing feelings of isolation): 'sharing experiences together was a bonding experience'; 'hearing about other people's difficulties made me feel less worried about my own'; 'group was the place I could try out my feminine voice skills and voice projection without feeling really foolish or self-conscious because we are all in together and having a go.'

- *Altruism* (participants' opportunity to support each other): 'it was empowering to feel I could be supportive to other people and they could be supportive to me'; 'collaboration is everything and being nice to each other in a harsh world.'

- *Installation of hope* (witnessing participants grapple and overcome difficulty): 'hearing the progress other people made in the group made me determined to keep going, keep practising my voice skills in a meaningful way for me and keep accepting myself every day'; 'voice group showed me voice change is possible.'

- *Giving and receiving information* (sharing information and support about services): 'I learned about life skills and other support networks by being in the group'; 'learning to give myself and other people constructive feedback was a revelation.'

- *Developing social skills* (group as a safe environment to extend communication skills): 'it was incredibly useful learning in role plays and developing social skills with others'; 'groups help you to examine and learn social rules and make practice OK.'

- *Cohesiveness* (sense of belonging, acceptance and validation): 'the group acts as a place of positioning ourselves'; 'a place of supportive comparison'; 'group members are not therapists, they are peers, they are there because they want to learn too and are on the same level playing field – this sort of validation is very important.'

- *Existential factors* (personal responsibility and self-efficacy): 'I realised that I have to accept myself and take responsibility for being kind to myself'; 'voice group made me realise the things I had to face up to, the things I could change and the things I could not.'

- *Imitating behaviour* (vocal and social skills modelled, observed and imitated the therapist and other participants): 'it was daunting at first to use my new voice in front of others but then that became the most important source of strength, and we learned by listening to each other'; 'listening to other people's voice and taking that on myself in my way helped me develop my best voice'; 'I became more confident about sharing feelings in discussion about my voice because the other members were doing the same.'

- *Catharsis* (relief from emotional distress through telling personal stories): 'telling other people the story of my voice helped me feel less stressed'; 'group work helped me find my new natural voice.'

- *Interpersonal learning* (increased awareness arising from feedback from therapist and group): 'I went on a journey from not knowing to knowing and I found a voice which fits me'; 'learning public speaking skills is such a great life tool and they are best learned in a group that is

supportive like voice group'; 'I learned what being true to myself really means and having a voice which is really mine and not a copy of someone else's.'

- *Self-understanding* (insight into deeper motivations underlying behaviour): 'By being in the group, I learned that everyone's voice is unique and we can accept difference even if the voice is not characterised as traditional, if you are watching out for your implicit biases and really feeling more congruent and comfortable with your sound.'

In both the *Charing Cross* and *West of England GIC* groups, participants reported a greater sense of taking risk in speaking up, singing out, sharing stories, role-play activities and idea generation. Clients reported being able to connect to and share unique and deeply meaningful areas of sensitivity and passion in their lives in the groups. Page (2009) identifies this as a significant factor in gift theory on the journey to self-acceptance and building community. Craig & Kelly (1999) report that successful groups which facilitate change and have less inhibited communication have a high degree of interpersonal cohesiveness (group members' attraction or liking of the group) and a high degree of task cohesiveness (the group's shared commitment/attraction to the group activity/task/goal). They also report that groups enable greater creativity and new ways of being when there is high task and high interpersonal cohesiveness conditions. Significant in our experience and client perception was that, whilst individuals made changes to their SFF and RFF, what was more important was the acceptance and emergence of the individual's authentic voice. That authenticity emerged because singing, speaking and the focus on openness and connection in group communication had developed and been witnessed by the group in an affirming and cohesive space. In the words of one singing group client: 'almost that...as an infant, we just threw off our shackles and we really started to show what we are.' This lends support to Bannan's (2000) comment that instinctive singing is a lifelong development of 'the child within' (p.295), and the playfulness that often emerges within group therapy can facilitate a more open attitude to experimenting with voice. Additionally, the quality of the therapeutic relationship can bring acceptance of self and hope for the future (Applegarth & Nuttal, 2016) and SLTs' skills in *holding* the group and facilitating sensitively timed and reflective feedback is a factor for change.

The Development of a Trans Men Voice and Communication Group Therapy Protocol

Whilst a number of studies have documented the effects of masculinising hormones in lowering the SFF for trans men (Adler, Constantinos & Van Borsel, 2012; Damrose, 2009; Zimann, 2010), trans men continue to report a difference between habitual pitch and 'passing pitch' (Davies, Papp & Antoni, 2015) and a high occurrence of being vocally misgendered well into testosterone treatment. Azul et al. (2017) highlight the diversity and complexity within the transmasculine population. This requires systematic assessment and a therapy approach that addresses voice change as part of complete identity (Nygren et al., 2016). Azul (2015) and Azul et al. (2017) discuss voice change within the whole 'vocal situation' (p.261.e9), one encompassing vocal parameters, self-perception, the collaborative effect of speaker and listener, and the influence of cultural and social norms. Based on the literature, a small-scale project between *Charing Cross* and *West of England* GICs in England was carried out, including a pilot workshop and a two-session voice group.

Pilot workshop: Nine trans men attended the pilot workshop. Participants completed a self-perception of voice and communication questionnaire pre- and post-pilot. 9/9 (100%) participants reported a positive shift in self rating of their voice on a 10-point Likert-type scale (*1= very female* to *10 = very male*), with 6/9 (66.6%) reporting that their ability to adapt the quality of their voice was less restricted and 3/9 (33.3%) remaining the same. Qualitative feedback on the programme was recorded: 'loud-

ness versus intonation was really helpful'; 'chest tapping and feeling my voice resonate at the back of my mouth connected me to my sound'; 'after this session I feel a deeper resonance and more consistent tone'; 'my throat feels more open'; 'using pausing means I have less tension in my breathing and a stronger voice'; 'my voice has more stamina and feels more powerful now', 'it's great hearing other guys' voices change so quickly – it's very motivating'. These results were used to inform the method and content of a two-session programme attended by a further ten participants.

Two-session programme: 10 trans men attended and the programme included:

- personal goal setting and review of current knowledge and skills;

- voice education: anatomy, physiology and voice care;

- voice *power*: breath-body connection, including discussion of chest binding effects on respiration and phonation and exercises for abdominal breath support);

- voice *source*: voice quality and onsets;

- voice *filter*: chest, pharyngeal and oral resonance; tension release in jaw and root of tongue;

- intonation versus loudness skills practice, moving into structured conversation then role-play activities;

- singing for voice flexibility and ease;

- assertiveness and speaking circle activities for relational presence and authenticity.

Participants completed a self-perception of voice and communication questionnaire pre- and post-programme. 9/10 (90%) participants reported a positive shift in self rating of their voice on a 10-point Likert-type scale (*1= very female* to *10 = very male*), with the remaining participant staying the same. A paired t-test was carried out and p=0.004 indicating high degree of significance, though this is a small sample.

This study supports the literature that therapy should target not only vocal parameters, for example resonance and loudness, but also self-perception, the interactional dynamics of speaker and listener, and voice function within a social context. The current study adds clinical evidence supporting a group therapy approach, and informs a voice and communication protocol for trans men groups that includes shared learning, listener perception and peer feedback (Mills & Stoneham, 2017b).

The Development of Client Lived Experience as Outcomes in Groups

Trans-sensitive models of therapy which affirm a client's unique gender identity, exploration and expression, are now more *visible* (Applegarth & Nuttal, 2016; Raj, 2002). Narrative Therapy developed by White and Epston (1990) is a highly valuing, collaborative form of systemic psychotherapy which enables clients to identify their values for living and makes visible the discourse of power and privilege. White (2007) held that an individual's identity is a social and community achievement, and that the stories of our lives we tell and re-discover in the presence of others, connect us to preferred identities, discounted skills and hidden knowledge. Narrative Therapy is increasingly being used in speech and language therapy to facilitate change in client self-concept and is especially pertinent to group work due to its community focus (Logan, 2013; Mills, 2016; Mills & Stoneham, 2017a). In response to NHS England Quality Surveillance Team initiatives to develop clinical indicators, Narrative Therapy approaches such as outside witness groups, therapeutic documents and deconstructing conversation

(White, 2007) are being developed as client-lived outcome measures in the Voice Group Programme at *Charing Cross* (Mills, 2016). Most recently, treating SLTs, in collaboration with Narrative Therapy colleagues, have adapted White's *Migration of Identity* work (1997) to produce a *migration of vocal identity map* which elicits clients' self-report of the degrees of despair/well-being along their journey towards integrating a new vocal pattern and authentic voice into everyday life. The migration follows White's stages of *separation* (client realisation that some adjustment is needed), *liminality* (the in-between stage characterised by disorientation and frustration) and *re-incorporation* (client sense of arrival at the new place which fits). This work is in development (see Mills & Stoneham, 2017a).

| | Separation | | Liminality | | | | | |
Re-incorporation								
	Pre voice exploration	Individual Therapy start	Individual Therapy Mid	Individual Therapy end	Voice group start	Voice group mid	Voice group end	Post voice exploration
10								
9								
8								
7								
6						×	×	×
5								
4					×			
3		×		×				
2				×				
1			×					
0								
-1								
-2		×	×					
-3								
-4								
-5	×							
-6								
-7								
8								
-9								
-10								

Figure 1: *Example of client 'migration of vocal identity map' adapted from White (1997), (Mills & Stoneham, 2017a)*

2. DELIVERING VOICE & COMMUNICATION AS PART OF A COMPLETE APPROACH TO TRANS AND GENDER DIVERSE HEALTHCARE AND THE ROLE OF SPEECH AND LANGUAGE THERAPY WITHIN GENDER SPECIALIST MULTI-DISCIPLINARY TEAM

The Good Practice Guidelines for the Assessment and Treatment of Adults with Gender Dysphoria Wiley et al., 2013) is the UK's intercollegiate document akin to the WPATH's Standards of Care. It states 'speech and language therapists should ideally work as part of a recognised multi-disciplinary team with established links to its members, especially psychotherapist colleagues' (p.45). *The Interim Gender Dysphoria Protocol and Service Guideline 2013/14* (NHS England, 2013) defines speech and language therapy as one of the *core treatments* 'commissioned by NHS England and available through NHS England-commissioned GICs' (p.12). Discussion of the complexities of NHS commissioning is beyond the scope of this paper, but the current review of the service specification of Specialist Gender Identity Services (SGIS) in England is anticipated to state that a specialist SLT must be embedded within every gender service multi-disciplinary team. At the time of publication, speech and language therapists are directly part of the teams in Gender Identity Clinics/ Services (GICs/GIS) in both Scottish centres (Edinburgh, Glasgow), Northern Ireland (Belfast) and 6/7 of the English centres (Leeds, London, Nottingham, Newcastle, Northampton, Sheffield).

The authors carried out a survey of multi-disciplinary (MDT) team professionals in all 10 UK Gender Identity Clinics/Services (GICs/GIS) to ascertain their understanding of what speech and language therapists bring both to clients and to team working. Responses were received from all seven English and one Scottish centre with represented perspectives from psychiatry, clinical and counselling psychology, psychotherapy, endocrinology and nursing specialist. Responses were not elicited from speech and language therapist colleagues. There were three questions:

1) *What role does speech and language therapy have within the gender MDT?*

2) *What contribution does speech and language therapy make to MDT case management?*

3) *What are the possible intersections between speech and language therapy and other gender specialist disciplines in the MDT?*

Responses were analysed and summarised as follows. *Question 1*: Voice and communication therapy is systemic and more than speech and language therapy, because SLTs support clients in improving interpersonal communication skills and facilitate evaluation and reframing of identity and personally authentic expression. SLTs offer reflection on the reality of socio-cultural norms, and how confirming or challenging these in different modalities of communication might impact on the individual and those around them. *Question 2*: SLTs bring a holistic, less medicalised perspective on wellness and psychosocial functioning, and can highlight to the team issues that may be concerning (ambivalences/ difficulties that require more support) or affirming in terms of client progress. Voice and Communication therapy is a process-orientated intervention providing practical and collaborative way clients engage with the clinic. *Question 3*: SLTs are not viewed by clients as gatekeepers to accessing surgery or hormone therapy, meaning that the therapeutic relationship may be less formal and conversations clients have with SLTs may have a depth and frankness not always captured by other clinical interactions. Clients are more at ease to reveal doubts (such as non-binary issues or 'non-expected narratives') to SLTs than to other team members because clients feel such disclosures to gatekeepers might threaten their treatment. This triangulation in the team offers a more authentic understanding of clients. Apart from vocal pathology and the links between voice and identity, SLTs bring specialist knowledge to the team regarding the intersection with gender and other communication issues – such as stammering (dysfluency), learning difficulties and Autism Spectrum Disorder (ASD). This is particularly pertinent in the latter because an audit at *Charing Cross* GIC found prevalence for clients

with diagnosed ASD at the clinic was 9.49% which is 8.6 times the prevalence within the general population, and 7.3% with suspected ASD which is 6.6 times the prevalence within the general population (Lenihan et al., 2016).

Significantly, in recognition of the intersections between psychology and speech and language therapy, a monthly psychosocial supervision group for both disciplines (in addition to MDT working) has been set up at the *Charing Cross* Gender Identity Clinic, which has contributed to Multi-Disciplinary Team Workshops at EPATH 2015 (complex cases and MDT working) and EPATH 2017 (authenticity and identity in voice change), and for the British Association of Gender Identity Specialists (Gorb, Stoneham & Mills, 2016).

3.   DEVELOPMENTS IN TRAINING AND COMPETENCY IN THE UK

Summary of training in trans-awareness and trans voice in SLT programmes in UK

Gender specialist clinicians need to be trans-affirmative in their practice (Richards & Barker, 2013) and treating SLTs must be clinically competent with knowledge of trans-specific healthcare and psychosocial issues (Davies, Papp & Antoni., 2015; Wiley et al., 2013). Confidence in clinical and cultural competence in treating trans clients in both the UK and USA is patchy among SLTs. Notably, 228 speech-language pathologists in Illinois were surveyed and reported feeling inadequately prepared to assess and treat trans clients (Sawyer, Perry & Dobbins-Scaramelli, 2014). We present here an overview of SLT training institutions in this field, and developments within professional networks in the UK.

A request for information on how and where trans voice and communication are currently introduced into UK speech and language therapy programmes revealed expanding inclusion overall, but a wide discrepancy in terms of time allocated and content covered. Information was gathered from 19 UK SLT programmes, three of which are post-graduate:

- *Introductory topics*

    Five undergraduate programmes introduced gender development and identity within psychology and sociology modules, with one programme specifically covering laryngeal and phonatory differences as part of anatomy and physiology. Two programmes provided some opportunities for discussion of trans voice and communication within an introduction to voice disorders or the MDT. In one programme, voice modification was introduced within an experiential voice workshop exploring the students' own pitch and resonance.

- *Voice Disorders modules*

    Nine programmes included specific assessment and management of trans voice and communication, within a general module on voice disorders (including voice and fluency) or the clinical application of voice theory. These modules were in either years 2 or 3 of undergraduate programmes and years 1 or 2 of PG Dip/Masters programmes. Three of these programmes offered three hours dedicated to trans voice and communication, with one including some additional independent study. Two programmes offered two hours, and four programmes an unspecified amount of time. Two of these programmes specified practical activities including peer training of a technique, for example pitch. One of the above programmes offered an advanced study option, and one some additional follow-up content in advanced voice management sessions**.**

Five additional programmes reported including some unspecified time on, or brief discussion of, trans voice and communication only within general modules on acquired disorders, communication impairment or communication disability.

Three programmes reported that trans voice and communication was not currently covered, or that this topic was only brief mentioned, as it requires postgraduate training or there were pressures on the curriculum.

- *Counselling skills*

Two programmes included case studies or discussion involving trans people within a counselling module in addition to content within voice disorders.

- *Research methods and Dissertations*

One programme included trans voice and communication as a topic in a research lecture, as the tutor has involvement in trans voice research. Three programmes reported having students who either had expressed an interest in trans voice as a dissertation topic, or had completed a dissertation on an aspect of trans voice. One programme reported that students had been involved in a research project.

- *Clinical Placement experience across all years*

Four programmes reported that students may have placement experience across all years. One additional programme offers voluntary experience within a group run by an academic. Institutions were not specifically asked about placement opportunities, and it is therefore acknowledged that this figure is likely to be higher where trans individuals are seen within voice clinics. Specialist speech and language therapists in GICs, however, are not routinely offering student placements and this is highlighted as an area for development, in particular in view of their potential contribution to group work.

Development of Competencies and Continuing Professional Development (CPD) in the UK

The Royal College of Speech and Language Therapists (RCSLT) support a number of clinical excellence networks (CENs). The National Transgender Voice and Communication Therapy Clinical Excellence Network (CEN) was launched in December 2015 to offer CPD and competency development at all levels for SLTs in the United Kingdom working in trans healthcare. At its inaugural study meeting in February 2016, a survey was carried out of 40 participant SLTs to elicit responses to a range of questions regarding experience, competence and confidence in clinical and vocal practice in voice modification. 30 surveys were returned and analysed with the following results:

- *Clinical voice interventions used*:

15/30 (50%) of respondents reported using Estill voice figures, for false vocal fold retraction, voice onset and laryngeal tilt (Estill, Klimek, Obert & Steinhauer, 2009a, 2009b; Steinhauer, McDonald Klimek & Estill, 2017). 15/30 (50%) reported using humming and intonation work. 15/30 (50%) reported using resonance work, although only two respondents cited Lessac-Madsen's Resonance Voice Therapy (RVT) (Verdolini, 2008). Accent Method (Thyme, Frokjaer-Jensen, 2001), diaphragmatic breathing and relaxation, Semi Occluded Vocal Tract Therapy (SOVTT) (Titze, 2006; Titze & Verdolini Abbott, 2012) were reported by 8/30 (27%). 17/30 (57%) reported using biofeedback for visual feedback of pitch and amplitude, citing Praat, Laryngograph, Speech Studio or Visipitch, and applications such as OperaVox.

- *Knowledge of vocal pedagogy:*

19/30 (63%) reported that skills in explaining voice mechanics and advising on vocal health were the most useful knowledge base. One respondent cited knowledge of laryngeal manipulation therapy. 15/30 (50%) respondents reported facilitating communication change using nonverbal communication behaviours, and 8/30 (27%) reported using voice recording and feedback. Other responses included observation and general discussion, with less than 8/30 (27%) delivering group therapy.

- *Post-graduate counselling training:*

  18/30 (60%) respondents described completing only 1 or 2 day short courses as part of CPD. 14/30 (47%) reported some training in Solution Focussed Brief Therapy (SFBT) (De Shazer & Doylan, 2012), and 11/30 (37%) in CBT in relation to psychogenic voice disorders (Butcher, Elias, Cavalli, 2007). 33% (10/30) of respondents reported that they had had no postgraduate counselling training at all. Other responses included one course in Mindfulness (Kabat-Zinn, 1990), one short course in Acceptance and Commitment Therapy (Harris, 2008); one respondent had completed an MA in Counselling, another, a post graduate diploma in Counselling and another, a diploma in Narrative Therapy. Psychological approaches used to support therapy intervention were generally described as being person-centred and 7/30 (23%) respondents stated that they were unsure or did not use any.

- *Current knowledge and skills with trans men and non-binary people*:

  11/30 (37%) respondents reported some experience or knowledge of working with trans men. 18/30 (60%) respondents reported either no or very little knowledge of working with trans men or non-binary clients.

- *CPD for developing confidence and competence:* 16/30 (53%) respondents reported that self-study in the form of reading and listening to voices helped them in developing confidence and competence. 11/30 (37%) respondents reported using singing to develop their own voice skills.

Overall, SLTs reported the need for psychological training to support voice modification interventions and, where post-registration counselling training had been completed, this tended to be via short courses of one or two days. SLTs reported personal experiences of singing as a hobby, but a lack of confidence in applying singing voice techniques in the context of voice modification therapy. Very few SLTs had clinical experience in voice masculinisation or working with non-binary clients. Therefore, SLTs submitted CPD requests for further learning opportunities in: developing their own voice competence; using psychological approaches to enable authentic voice; and assessing and providing therapy for trans men and non-binary clients.

Ongoing CEN CPD events provide important opportunities for learning about the wider field of trans health beyond specific voice interventions. Leading psychiatrists, psychologists and SLTs in trans health have presented on authenticity and vocal identity, stigma and shame experienced by trans clients (and their potential effect on communication), and aspects of endocrinological and surgical care. The CEN is currently piloting a perceptual rating tool *OPERA* (where O = *onset of voice*; P = *pitch/dynamic range*; E = *easy on the ear: warmth in tone, authenticity*; R = *resonance balance*; A = *amplitude*) that SLTs might use to describe parameters of voice to assist client-personalised goal planning. Working in direct partnership with clients to develop this perceptual framework enables SLTs to develop awareness of their potential hetero-cis-normative unconscious biases, and how these may influence their approach to gender presentation and notions of 'passing' (see Worthen, 2016). By incorporating authenticity and vocal identity into shared goal-setting (see Kernis & Goldman, 2006; Martinez et al., 2017), therapists ensure that the client's own perception and vocal self-concept is foregrounded.

As part of supporting CPD, the Royal College of Speech and Language Therapists (RCSLT) is currently in the process of producing its *Trans and Gender Diverse Voice and Communication Therapy Competency Framework*. The framework describes the skills and knowledge at levels of competency in voice and communication assessment and therapy from developing voice specialist to established voice specialist (including those who work in GICs and those who do not). It will be used to skill the growing workforce required within the NHS and independent practice, in particular to meet the rapidly expanding caseload of trans and gender diverse clients UK-wide.

CONCLUSIONS

1) ***Expansion of the evidence base in clinical practice, in particular innovations in voice group therapy for trans women and trans men in the trans care pathway***.

   - Evidence from clinical practice demonstrates that a voice group is a highly effective therapy approach in the trans care pathway. The group functions as a witnessing and community support, where shared learning promotes interpersonal and task cohesion within a safe space for risk-taking. Within these functions, therapy is more able to focus on the social and cultural context of voice, and the listeners' perspective, in addition to vocal parameters. Furthermore, new clinical evidence supports that changes in clients' self-perception are an essential outcome for measuring authentic voice and communication as part of reframing identity and achieving desired gender-comfort. Narrative Therapy provides a useful psychological framework within which to measure client lived outcomes.

   - 3 voice group projects provide evidence for protocols for both trans women and trans men. Generic intervention protocols for all clients should include: strengths-based shared goal–setting; voice education and voice care to promote safe practice; a sense of play including singing for freeing the voice, developing flexibility and range, and general well-being; and peer coaching and feedback to include both speaker and listener perceptions. Specific voice group intervention protocols for trans women include: managing constriction; voice onsets, namely breathy, speech quality and smooth qualities; oral resonance development; voice function dynamics of intonation versus loudness in conversational expression; voice contexts, for example projection, telephone use and public speaking; developing relational presence. These parameters contributed to participants' perception of their voices being more feminine. Specific voice group intervention protocols for trans men include: managing vocal fatigue and promoting stamina through voice-body connection, including issues regarding chest binding; abdominal breath support; tone onset; chest and pharyngeal resonance development; voice function dynamics of loudness versus intonation in conversational expression; voice contexts requiring an assertive skillset and developing relational presence. These parameters contributed to participants' perception of their voice as being more masculine.

2) ***Delivering voice and communication therapy as part of a complete approach to trans and gender diverse health care including the role of speech and language therapy within a gender specialist multi-disciplinary team***.

- Acceptance of the current review of the service specification of Specialist Gender Identity Services (SGIS) in England will state that a specialist SLT must be embedded within every gender service multi-disciplinary team. Specialist professionals agree that voice and communication therapy is systemic, with SLTs providing a triangulation that brings a more authentic understanding of clients. SLTs foster a holistic perspective on client wellness and psychosocial functioning. In addition, professional colleagues appreciate the opportunity that voice therapy provides for the client to engage with the clinic in a practical and collaborative way. SLTs bring specialist knowledge to the team regarding other communication issues, in particular Autism Spectrum Disorder (ASD), where recent evidence indicates its prevalence within the field.

- Significantly, in recognition of the intersections between psychology and speech and language therapy, there has been development in inter-professional supervision groups and national and international conference workshops. The perceptions around the broader role of the specialist SLT in trans voice and communication has implications for post-registration training in complementary psychological approaches, discussed in 3) below.

3) *Developments in training and competency in the UK*:

- Recent UK professional developments include: the *Trans and Gender Diverse Voice and Communication Therapy Competency Framework* by the RCSLT, the National Transgender Voice and Communication Therapy CEN, and inclusion of specific trans voice and communication content within UK pre-registration programme content and research projects. These are indicators of positive responses to the growth in interest and in the number of SLTs seeking to develop specialist skills within this field.

LIMITATIONS

The following innovations are reviewed and discussed from a small-scale research project, surveys, service evaluations, audits, and leading clinical practice in the UK. The authors acknowledge that practice foregrounds developing evidence and that clinicians in this field need stronger collaborative links with research colleagues at this time of significant clinical expansion within the UK.

Conflict of Interests:

The authors have no conflict of interest to declare.

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