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## Examining the Quality of Life in Transgender Women Following Gender Affirming Voice Treatment

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EXAMINING THE QUALITY OF LIFE IN TRANSGENDER WOMEN FOLLOWING  
GENDER AFFIRMING VOICE TREATMENT

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Georgina Lissette Salas

2021

EXAMINING THE QUALITY OF LIFE IN TRANSGENDER WOMEN FOLLOWING  
GENDER AFFIRMING VOICE TREATMENT

by

GEORGINA LISSETTE SALAS B.S.

THESIS

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## **CHAPTER 1: LITERATURE REVIEW**

### **1.1 INTRODUCTION**

According to the Williams Institute (2016), 1.4 million adults in the U.S. identify as transgender (TG). The term TG refers to “a person whose gender identity differs from the sex that was assigned at birth” (UCSF, 2016). Individuals that identify as TG have a deep inner sense of being either male, female, or somewhere on the gender spectrum that does not match the sex that was assigned at birth (UCSF, 2016). TG individuals face many challenges such as discrimination and violence especially if they do not “pass”. Therefore, TG individuals may choose to transition.

### **1.2 TRANSITION**

During the process of transition, a TG person will change their gender presentation or sex characteristics to conform to their identified gender. The process of transition can include legal and/or physical changes. The legal process of transition may include legal name, sex, and pronoun change on important documents such as passports or social security cards. The physical process of transition is often one that includes physical changes to the body. These can include bottom or top surgery, electrolysis for hair removal, and hormone replacement therapy (HRT) (UCSF, 2020). Completing the physical appearance is crucial for those to begin accepting themselves as well as being accepted in society. However, once the physical process is completed often transgender persons are still outed as being transgender. This happens most often to those who are transitioning from male to female (MtF). While TG persons may complete the physical change, they may still be in danger of being outed because of their voice. As a result, TG persons may seek gender-affirming voice treatment services to modify their voice to match the outward appearance (Venier, 2017).

### **1.3 GENDER AFFIRMING VOICE TREATMENT**

Gender affirming voice treatment may be a key component to completing the transition of a TG person (Hancock, 2016). It should be noted that most of the TG persons seeking gender affirming voice treatment are Male to Female (MtF) TG persons. Female to Male (FtM) TG persons are less likely to seek voice-affirming treatment because testosterone supplements increases the mass of the vocal folds resulting in a lower pitch (Hancock, 2016).

This is not the case for those individuals who are transitioning from MtF. The estradiol and testosterone blockers which MtF TG persons use, cause many physical changes to the body resulting in feminine characteristics including breast growth and decrease of body and facial hair(USCF,2016).However, these hormones do not change the mass of the vocal folds therefore the pitch does not change. A voice that does not match the outward appearance has been linked to decreased quality of life. For example, in a study by Venier (2017), it was confirmed that individuals who are transitioning from MtF, consider themselves as having a low quality of life as their voice does not affirm their gender. The author completed a critical review of TG women who had received surgery as treatment to affirm their voice, as well gender affirming voice treatment. The author included group studies as well as survey studies. The study results included in the author's critical review indicated TG persons have a lower quality of life before they began any treatment. As these individuals do not consider themselves accepted in society for the fear of being outed, or living freely as transgender, this has greatly impacted the completion of their transition as well as their quality of life.

The CDC (2018) defines health-related quality of life as “an individual’s or groups’ perceived physical and mental health over time.” The Oxford Dictionary (2021) defines Quality of life as “the standard health, comfort, and happiness experienced by an individual or group.”



Based on these definitions quality of life is a broad concept and can be dependent on the individual defining what they consider quality of life. TG persons consider themselves to have a low quality of life as they feel that their gender identity does not match the sex they were assigned at birth (Nobili et. al. 2018). Furthermore, TG persons are constantly ridiculed in society for their choices (Nobili et. al. 2018). According to the literature, transwomen expressed frustration at achieving a feminine appearance and being able to physically pass as women to others but were identified as TG by their voice. This incongruity is highly likely to result in mental health issues including depression and isolation (Venier, 2016). According to Hancock, Krissinger and Owen (2011), satisfaction with the voice is essential for the TG person's transition to be successful. Similarly, a study that examined happiness with self-perceived femininity of voice in 12 TG women McNeil et. al. (2008), found that happiness did not correlate with the pitch but rather with self-perception of vocal femininity.

Hancock (2016) reported that TG persons suffer from anxiety and withdrawal from society resulting in few social interactions. Similarly, Bultynck et. al., (2020) study on organization of the Transsexual Voice Questionnaire (TVQ, Dacakis et al., 2013) reported that TG persons not receiving gender affirming voice treatment reported feelings of discomfort, anxiety and avoidance. Findings from other studies including Hancock (2016) suggest that TG persons whose voice does not match their gender identity also face challenges such as decrease of personal relationships and difficulty with employment. In another study by Hancock (2016) quality of life was examined in relation to the International Classification of Functioning, Disability, and Health (ICF) model in 81 TG women. The participants were asked to complete the TSEQ (Transgender Self Evaluation Questionnaire, 2006). The results of this study showed that limitations related to activity and participation were the most common concerns among TG

women. In yet another study, voice related quality of life was examined using the TSEQ (2006) in both transmen and transwomen (Oates & Dacakis, 2015). The TSEQ (2006) was modified for use with transmen. Seventeen transmen and 10 transwomen were asked to complete the survey. The results showed a correlation between poor voice perception and poor quality of life. In a report detailing the use of evidence-based treatments for voice-affirming management, Oates and Dacakis (2015) report that a voice that is not congruent with the identified gender leads to psychosocial issues, poor financial wellbeing, and decreased quality of life. Due to the challenges that TG persons experience due to a voice that is not congruent to the identified gender, it is imperative that quality of life continue to be examined in TG persons.

## **CHAPTER 2: METHODS**

### **2.1 INTRODUCTION**

This is a case study that examines the effects of voice affirmation therapy on the quality of life of transgender women. The study was approved by The University of Texas at El Paso Institutional Review Board.

### **2.2 PARTICIPANTS**

The purpose of this study was to examine the effect of gender affirming voice treatment on the quality of life of TG women. The inclusion criteria for participants included: individuals that identify as TG women, have received gender-affirming voice treatment and are between the ages of 18-70 years of age. Exclusion criteria includes any individual that does not identify as a TG woman and falls outside of the 18-70 year age requirement. Participant recruitment was completed through word of mouth via facilities and organizations that service and/or are frequented by TG persons.

### **2.3 SURVEY**

The Transgender Self-Evaluation Questionnaire (TSEQ) and the Voice Handicap Index (VHI) were used to assess quality of life in all of the participants. In addition, the survey included questions about demographics to include age, ethnicity, gender identity, medical insurance status, history of gender affirming voice treatment, and history of gender-affirming surgical procedures for voice. The survey was constructed using the secure site QuestionPro in order to facilitate the online format. For the final part of the survey the participants were asked to fill out

the TSEQ and VHI. No identifying information was included in survey to trace or reveal the identity of the participants. Therefore, all personal information was de-identified.

## **2.4 PROCEDURE**

Participants were asked to fill out the survey which took approximately 25-30 minutes to complete. By checking “begin survey” box, the participant was consenting to participate in the study. Within the consent page, participants were informed that they could drop out of the study at any time during the survey without any penalties.

### CHAPTER 3: RESULTS

The study initially began with 4 participants; however, one participant did not complete the survey. Therefore, the results included in this study are from the remaining 3 participants that completed the survey in its entirety. All participants that completed the study identified as white/Caucasian with age ranges of 25-64. Their mean age range was 35-44. The participants reported they did not undergo any surgical procedures for modification of their voice. All three participants indicated they had medical insurance and had received gender affirming voice treatment in the past. None of the participants specified the length of gender affirming voice treatment received.

The results of this study were qualitatively analyzed. The VHI (1997) is a subjective questionnaire that examines an individual's perception of how their quality of life is impacted by a voice disorder. The TSEQ (2006) is a subjective questionnaire that examines an individual's perception of vocal femininity and the impact on quality of life. The two surveys correlate with one another as the TSEQ (2006) was derived using aspects of the VHI (1997). Responses to the VHI (1997) and TSEQ (2006) statements which were presented using an online format were categorized into thematic units such as "anxious/avoidant", "social isolation" and "social/self-acceptance". Table 1.1 shows the responses that were perceived as negatively impacting the participants' quality of life.

**Table 1.1 PARTICIPANT NEGATIVE RESPONSES**

| <b>Survey Statement</b>                                | <b>Thematic Unit</b>   | <b>Responses</b>     | <b>Survey</b> |
|--|------------------------|----------------------|---------------|
| I try to change my voice to sound different.           | Social acceptance      | Almost always-always | VHI (1997)    |
| I am tense when talking to others because of my voice. | Anxiety/avoidance      | Almost always-always | VHI (1997)    |
| My voice problem upsets me.                            | Social/self-acceptance | Always               | VHI (1997)    |

|   |                          |                        |             |
|---|--------------------------|------------------------|-------------|
| I find other people don't understand my voice problems.   | Social/self-acceptance   | Always                 | VHI (1997)  |
| I am ashamed of my voice problem.   | Social/self-acceptance   | Almost always – always | VHI (1997)  |
| My ideal voice would sound: very female/somewhat female.  | Social/self-acceptance   | Almost always – always | TSEQ (2006) |
| I use the phone less often than I would like.   | Anxiety/avoidance        | Almost always          | TSEQ (2006) |
| I feel my voice sounds artificial to others.  | Social/self-acceptance   | Almost always – always | TSEQ (2006) |
| I don't feel my voice reflects the “true me”  | Social/self-acceptance   | Always                 | TSEQ (2006) |
| I feel self-conscious about how strangers perceive my voice.  | Social/self-acceptance   | Almost always – always | TSEQ (2006) |
| I find it upsetting when I'm perceived as a man (MTF)/woman (FTM) on the phone.                             | Social/self-acceptance   | Almost always – always | TSEQ (2006) |
| I am envious of other women (MTF) / men (FTM) who have more feminine (MTF/masculine (FTM) voices than mine. | Social/ self-acceptance  | Almost always – always | TSEQ (2006) |
| My voice embarrasses me.  | Social/ self- acceptance | Almost always – always | TSEQ (2006) |

The Thematic Unit in Table 1.1 had the highest number of negative responses for all three of the participants. An example of a question that was rated as being negative included “embarrassing, and upsetting” and having a negative effect on the participants’ quality of life.

Table 2.1 shows the results for Thematic unit labeled as “social isolation”. These responses indicate that participants engage in social isolation behaviors. However, the participants’ responses were not “always” but rather “almost never to never”.

**Table 2.1 PARTICIPANT RESPONSES OF SOCIAL ISOLATION**

| <b>Statement</b>                                      | <b>Thematic Unit</b> | <b>Responses</b>   | <b>Survey</b> |
|---|----------------------|--------------------|---------------|
| I tend to avoid groups of people because of my voice. | Social isolation     | Almost never-never | VHI (1997)    |

|  |                        |                     |             |
|--|------------------------|---------------------|-------------|
| I speak with friends, neighbors, relatives less often because of my voice. | Social isolation       | Almost never- never | VHI (1997)  |
| My voice difficulties restrict my personal and social life.                | Social isolation       | Almost never-never  | VHI (1997)  |
| I have to strain to make my voice sound like I want it to.                 | Social/self-acceptance | Almost never-never  | TSEQ (2006) |

The results in Table 2.1 show that while these participants have had gender affirming voice treatment , the participants did feel that they need to social isolate themselves. While the responses in Table 2.1 were the second most prominent theme the participants’ responses indicated that they engage in social isolation less frequently than engaging in behavior of “social/self-acceptance”. As the participants reported lower incidence of social isolation, such as avoiding large gatherings, using the phone less often, and speaking with neighbors and friends less often because of their voice.

## CHAPTER 4: DISCUSSION

The purpose of this study was to examine the effect of gender affirming voice treatment on quality-of-life in transgender women. The results of the study show that the participants in this study consider their “voice” upsetting, embarrassing and that it does not reflect their “true self.” Furthermore, based on the qualitative analysis the most common theme was that of “social/self-acceptance.” This suggest that the participants in this study felt that their “voice” made it difficult for them to accept themselves and that gender affirming voice treatment did not improve quality of life in these participants. Furthermore, the results show that the participants in this study have a lower quality of life. The results of this study contradict the results found in the study conducted by Venier (2017), as well as in Hancock et al. (2013) and Pasricha et al. (2008) that found that quality of life increased as a result of gender affirming voice treatment.

The results of this study suggest that completing gender affirming voice treatment may not be enough to increase the quality of life in this group of participants. In addition, since all the participants, had received gender affirming voice treatment, the results for the thematic unit of “social/self-acceptance” were surprising given the literature which shows that gender affirming voice treatment results in improved quality of life. This may indicate the participants are not as pleased with their voice as they would like and that a gender affirming voice treatment maintenance program or follow-up may be beneficial.



## **CHAPTER 5: STUDY LIMITATIONS**

This study had several limitations including a small sample size. This may have been attributed to the COVID19 pandemic and the PI's inability to physically recruit participants. Therefore, the results of this study cannot be generalized to the population being studied. Additionally, the duration of gender affirming voice treatment was not examined and this was not asked on the survey. It can be argued that the length of gender affirming voice treatment and actively participating in treatment may have an effect on quality of life in transgender women. While there have been some positive effects to improving quality of life, the concerning part of the study was sustaining previous improved quality of life. Lastly, the topic of this study may also have contributed to the limited number of participants. This population is a very vulnerable one and fear of being outed may have been the reason for the lack of participation from this specific population.

This study should be continued and should examine a comparison between TG women who have received gender affirming voice treatment and TG women who have not received the treatment. Finally, this study should be continued with physical recruitment of participants which may yields a greater number of participants and possibly different results.

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## APPENDIX

What is your age range?

1. 18-24
2. 25-34
3. 35-44
4. 45-54
5. 55-64
6. 65 or over

Please specify your ethnicity.

1. Prefer not to say
2. Other
3. Multiracial
4. Caucasian or white
5. Native Hawaiian or other pacific islander
6. Black or African American
7. Asian
8. American Indian or Alaska Native
9. Hispanic or Latino

Do you have medical insurance?

1. Yes
2. No

Have you received voice-affirming therapy?

1. Yes
2. No

Have you had any surgical procedures for voice?

1. Yes
2. No

## Voice Handicap Index

0-never      1-almost never      2-sometimes      3 almost always      4- always

### Part I-F

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| My voice makes it difficult for people to hear me                             | 0 | 1 | 2 | 3 | 4 |
| People have difficulty understanding me in a noisy room.                      | 0 | 1 | 2 | 3 | 4 |
| My family has difficulty hearing me when I call them throughout the house.    | 0 | 1 | 2 | 3 | 4 |
| I use the phone less often than I would like to.                              | 0 | 1 | 2 | 3 | 4 |
| I tend to avoid groups of people because of my voice.                         | 0 | 1 | 2 | 3 | 4 |
| I speak with friends, neighbors, or relatives less often because of my voice. | 0 | 1 | 2 | 3 | 4 |
| People ask me to repeat myself when speaking face-to-face.                    | 0 | 1 | 2 | 3 | 4 |
| My voice difficulties restrict my personal and social life.                   | 0 | 1 | 2 | 3 | 4 |
| I feel left out of conversations because of my voice.                         | 0 | 1 | 2 | 3 | 4 |
| My voice problem causes me to lose income.                                    | 0 | 1 | 2 | 3 | 4 |

### Part II-P

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| I run out of air when I talk.                         | 0 | 1 | 2 | 3 | 4 |
| The sound of my voice varies throughout the day.      | 0 | 1 | 2 | 3 | 4 |
| People ask, "What's wrong with your voice?"           | 0 | 1 | 2 | 3 | 4 |
| My voice sounds creaky and dry.                       | 0 | 1 | 2 | 3 | 4 |
| I feel as though I have to strain to produce voice.   | 0 | 1 | 2 | 3 | 4 |
| The clarity of my voice is unpredictable              | 0 | 1 | 2 | 3 | 4 |
| I try to change my voice to sound different           | 0 | 1 | 2 | 3 | 4 |
| I use a great deal of effort to speak                 | 0 | 1 | 2 | 3 | 4 |
| My voice is worse in the evening.                     | 0 | 1 | 2 | 3 | 4 |
| My voice "gives out" on me in the middle of speaking. | 0 | 1 | 2 | 3 | 4 |

### Part III-E

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| I am tense when talking to others because of my voice. | 0 | 1 | 2 | 3 | 4 |
| People seem irritated with my voice.                   | 0 | 1 | 2 | 3 | 4 |
| I find other people don't understand my voice problem. | 0 | 1 | 2 | 3 | 4 |
| My voice problem upsets me.                            | 0 | 1 | 2 | 3 | 4 |
| I am less outgoing because of my voice problem.        | 0 | 1 | 2 | 3 | 4 |
| My voice makes me feel handicapped.                    | 0 | 1 | 2 | 3 | 4 |
| I feel annoyed when people ask me to repeat.           | 0 | 1 | 2 | 3 | 4 |
| I feel embarrassed when people ask me to repeat.       | 0 | 1 | 2 | 3 | 4 |
| My voice makes me feel incompetent.                    | 0 | 1 | 2 | 3 | 4 |
| I am ashamed of my voice problem.                      | 0 | 1 | 2 | 3 | 4 |

## Transgender Self Evaluation Questionnaire

How do you rate your voice? (overall)

Currently my voice is:

- Very female
- Somewhat female
- Gender neutral
- Somewhat male
- Very male

My ideal voice would sound:

- Very female
- Somewhat female
- Gender neutral
- Somewhat male
- Very male

### RATING SCALE

1=never  
 2=almost  
 3=sometimes  
 4= almost always  
 5=always

## How often do you experience the following?

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| People have difficulty hearing me in a noisy room.                            | 1 | 2 | 3 | 4 | 5 |
| I have trouble finding a vocal range that feels authentic to me.              | 1 | 2 | 3 | 4 | 5 |
| My voice makes me feel less feminine(MTF)/masculine(FTM).                     | 1 | 2 | 3 | 4 | 5 |
| I feel the pitch range of my voice is restricted.                             | 1 | 2 | 3 | 4 | 5 |
| The sound of my voice varies throughout the day.                              | 1 | 2 | 3 | 4 | 5 |
| I feel my voice gets in the way of me living as a woman(MTF)/man(FTM).        | 1 | 2 | 3 | 4 | 5 |
| I use the phone less often than I would like.                                 | 1 | 2 | 3 | 4 | 5 |
| I'm tense when talking with others because of my voice.                       | 1 | 2 | 3 | 4 | 5 |
| I tend to avoid groups of people because of my voice.                         | 1 | 2 | 3 | 4 | 5 |
| People seem irritated with my voice.  | 1 | 2 | 3 | 4 | 5 |
| People ask, "What's wrong with your voice?"                                   | 1 | 2 | 3 | 4 | 5 |
| I speak with friends, neighbors and relatives less often because of my voice. | 1 | 2 | 3 | 4 | 5 |
| I avoid speaking in public because of my voice.                               | 1 | 2 | 3 | 4 | 5 |
| I feel my voice sounds artificial to others.                                  | 1 | 2 | 3 | 4 | 5 |
| I have to strain to make my voice sound like I want it to.                    | 1 | 2 | 3 | 4 | 5 |
| I feel frustrated with trying to change my voice.                             | 1 | 2 | 3 | 4 | 5 |
| My voice difficulties restrict my personal and social life.                   | 1 | 2 | 3 | 4 | 5 |
| The pitch of my voice is unreliable.  | 1 | 2 | 3 | 4 | 5 |
| When I laugh, cough or sneeze, I sound like a man(MTF)/woman(FTM).            | 1 | 2 | 3 | 4 | 5 |
| I feel my voice doesn't match my physical appearance.                         | 1 | 2 | 3 | 4 | 5 |
| I use a great deal of effort to speak.  | 1 | 2 | 3 | 4 | 5 |

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| My voice is worse in the evening.  | 1 | 2 | 3 | 4 | 5 |
| My voice causes me to lose income.   | 1 | 2 | 3 | 4 | 5 |
| I don't feel my voice reflects the "true me".  | 1 | 2 | 3 | 4 | 5 |
| I am less outgoing because of my voice.  | 1 | 2 | 3 | 4 | 5 |
| I feel self-conscious about how strangers perceive my voice.   | 1 | 2 | 3 | 4 | 5 |
| My voice "gives out" in the middle of speaking.  | 1 | 2 | 3 | 4 | 5 |
| I find it upsetting when I'm perceived as a man(MTF)/woman(FTM) on the phone.                          | 1 | 2 | 3 | 4 | 5 |
| I am envious of other women(MTF)/men(FTM) who have more feminine (MTF)/masculine(FTM) voice than mine. | 1 | 2 | 3 | 4 | 5 |
| My voice embarrasses me.   | 1 | 2 | 3 | 4 | 5 |

## VITA

Georgina Lissette Salas was born and raised in El Paso, Texas. She was born to Luis and Dora Salas and is the youngest of 3 children. Upon her high school graduation from Eastwood High School, Georgina began her collegiate career and received her bachelor's degree from The University of Texas at El Paso. While pursuing her bachelor's degree, Georgina worked as a part-time sales associate at American Eagle Outfitters as well as being an active member of The University of Texas at El Paso's NSSHLA chapter. In the Spring of 2019, Georgina graduated Cum Laude at The University of Texas at El Paso with a Bachelor of Science in Rehabilitation Sciences with a concentration in Speech-Language Pathology. In the Fall of 2019, Georgina began graduate school at The University of Texas at El Paso in the Master of Science in Speech-Language Pathology Program. During her first year, she worked as a graduate research assistant under the mentorship of Dr. Patricia Lara.

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