

# SELF-PERCEIVED VOCAL HEALTH AND SOCIAL PARTICIPATION AMONG OLDER ADULTS

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## ABSTRACT

### Aim

The aim of this study is to investigate the association between self-perceived voice problems and social participation among older adults (65-80 years). A complementary aim was to investigate the association between self-perceived voice problems and physical activity.

### Method

Participants were recruited through social media and asked to complete an online questionnaire. In total, 152 individuals were included, aged 65 to 80 years. The questionnaire consisted of 26 questions: demographic information, vocal health, physical activity and social participation. In this study, the focus is on vocal health and social participation, including physical activity. Questions regarding vocal health were based on Voice Handicap Index (VHI) by Jacobson et al. (1997) and the questions regarding social participation were inspired by Howery and Hand (2019).

### Results

Preliminary analyses show that 57.9% of all participants experienced voice problems. Preliminary results further suggests that there was no significant association between self-perceived vocal health and social participation, but a significant association between self-perceived vocal health and physical activity. The highest levels of social participation were found in the age group 71-75 years.

**Keywords:** *vocal health, social participation, communicative participation, digital survey, presbyphonia.*

## 1. INTRODUCTION

Subjective voice problems are common among older adults [1]. As a result of age related voice problems (presbyphonia), the voice quality may include instability, breathiness, [2] decreased intensity [3] and altered pitch [4]. Research has mainly focused on treatment-seeking older adults, and the social consequences of voice changes in older ages are scarcely examined.

Social participation is a frequently used variable in social sciences and social medicine [5-6]. Social participation decreases with aging [6] despite being a central variable for quality of life in older adulthood [7]. A focus group study concerning how older adults relate to their own voices indicated that social participation might be affected by undiagnosed voice problems among older adults [8].

Associations between low physical activity level and history of having a voice disorder [9], and physical health and history of voice disorders [10] have also been observed.

The aim of this study is to investigate the association between self-perceived voice problems and social participation. A complementary aim was to investigate the association between self-perceived voice problems and physical activity.

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## 2. METHOD

### 2.1 Participants

Participants were aged between 65 and 80 years and living in Sweden. In total, 152 individuals were included in the study of which 113 were women and 39 were men.

An inclusion criteria to participate in the study was that participants should be otherwise healthy older adults with perceived good general health. An exclusion criterion was that participants should not undergo voice treatment at the time of participation in the study.

Recruitment was conducted via social media in total 69 Facebook groups primarily aimed at older adults.

### 2.2 Digital questionnaire

Questionnaires were distributed via social media. In the digital Facebook post, brief information was given concerning the survey, aim of the study and instructions regarding participation in the study via a link to the survey. The Facebook post was published for twelve days, between 24.02.2022 and 07.03.2022.

The questionnaire consisted of 26 questions regarding demographic information, vocal health, physical activity and social participation. Demographic information was collected by questions regarding gender, age and general health. Other questions addressed use of hearing aid and physical activity. Self-perceived vocal health was assessed with a question regarding vocal symptoms like “throat clearing”, “a strained feeling in my throat when I talk” and “dry throat” (based on Voice Handicap Index (VHI) [11]).

Social participation was based on a question regarding frequency of participating in a number of mentioned social activities [12].

### 2.3 Statistical analyses

Chi<sup>2</sup>-test was performed to identify differences in social participation between three age-groups; 65-70, 71-75 and 76-80. Chi<sup>2</sup>-test was also performed to identify differences in social participation between participants who had vocal symptoms and participants who did not have vocal symptoms.

Spearman’s rank correlation was conducted to investigate whether there was a correlation between vocal health and physical activity.

## 3. PRELIMINARY RESULTS

### 3.1 Descriptives

Preliminary analyses show that 57.9% of all participants (N=152) experienced vocal symptoms.

Social participation among participants varied between 9.9% daily, 58.6% a couple of times a week, 13.8% once a week, 11.2% a couple of times a month, 2% at least once a month, 3.9% not at all during the past month and 0.7% never. Out of a total of 152 participants, 36.2% engaged in physical activity “2 hours or more” per week.

Hearing aid to be able to socialize was used by 19 participants. Most were in the age group 76-80. In total, 7 participants used hearing aids occasionally and 126 participants did not use hearing aid. Use of hearing aid will be analysed in the final analyses.

### 3.2 Analyses

There were no significant differences in social participation between participants who had vocal symptoms and those without vocal symptoms ( $p = 0.109$ ). The highest levels of social participation were found in the age group 71-75 years. Preliminary results suggests that there was a significant correlation between self-perceived vocal health and physical activity ( $R[150] = 0.219$ ,  $p = 0.007$ ).

## 4. CONCLUSION

Preliminary results suggests no significant difference in social participation between participants who had vocal symptoms and participants who did not. The highest levels of social participation were found in the age group 71-75 years. Preliminary results further indicate a significant association between self-perceived vocal health and physical activity. Associations between self-perceived vocal health and social participation will be further explored.

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