

## البحث السادس (بحث مشترك ـ منشور ـسبق تقييمه<u>)</u>

اسم البحث باللغة الانجليزية:

### Fundamental Frequency and Jitter Percent in MDVP and PRAAT

# اسم البحث باللغة العربية:

التردد الأساسي ونسبة الارتعاش في برنامج الصوت متعدد الابعاد و برات المشاركون في البحث:

1- احمد عبد الحميد محيد عبد الجواد أستاذ مساعد أمراض التخاطب بقسم الأذن والأنف والحنجرة - طب عين شمس 2- احمد ناجي أستاذ مساعد أمراض التخاطب بقسم الأنف والأذن و الحنجرة طب الفيوم

# مكان وتاريخ النشر:

Journal of Voice - Published online on 26 April 2021 DOI:https://doi.org/10.1016/j.jvoice.2021.03.008

#### Abstract

**Purpose**. This study initially investigated the relationship between Fundamental Frequency and Jitter Percent across and within MDVP and PRAAT. Subsequently, it explored if the measured acoustic signal's Length or the analysis temporal segment selection impacts potential correlation across the tools' measures.

Methods. We collected forty-two Maximum Phonation Time acoustic signals from 10 participants with Healthy Voices in a standardized setting. We excluded from enrolment any potential participants having a history of voice disorders or showing an abnormality in a pre-study assessment. Results. There is no correlation between Jitter percent's values and Fundamental Frequency within either Tool in our healthy voice samples. The Length of the acoustic signal and temporal analysis selection impact the correlation between Jitter Percent measurements across the two tools; The correlation between Fundamental Frequency measurements across the devices was not affected. Means of Fundamental Frequency did not differ across the two devices but show a persistent pattern of greater values in MDVP. Jitter Percent measurements were significantly higher in MDVP Conclusions. There is a potential for clinicians using PRAAT assessments in the clinic to make inferences from research using MDVP as an analysis tool. Further work is needed in patients with Voice disorders to explore that possibility.

رئيس قسم الأنف والأذن و الحنجرة عميد الكلية أ.د/ سامح أمين أ.د/ حمدي محمد إبراهيم