

Abstract Submitted
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Experimental study of the effects of airflow and vocal fold stiffness on male and female voice production¹ ELIZABETH CAMPO, MCPHAIL MICHAEL, KRANE MICHAEL, ARL Penn State — The effect of airflow in voice production is not fully understood, leading to difficulties when clinically diagnosing voice disorders. Many existing studies in this this area focus primarily on the male physiology. This study incorporates 2-layer, molded silicone vocal fold models whose geometry mimics the shape and dimensions of both male and female vocal folds. Measured quantities include subglottal and transglottal pressure, volume flow rate, and radiated sound. The results are used to clarify the relationship between glottal airflow and sound production. The Implications of the measurements for similarities and differences between male and phonation are discussed.

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