

Figure 12-1. Dysphonic voice production on MDVP (clinical illustration by the author of this chapter).

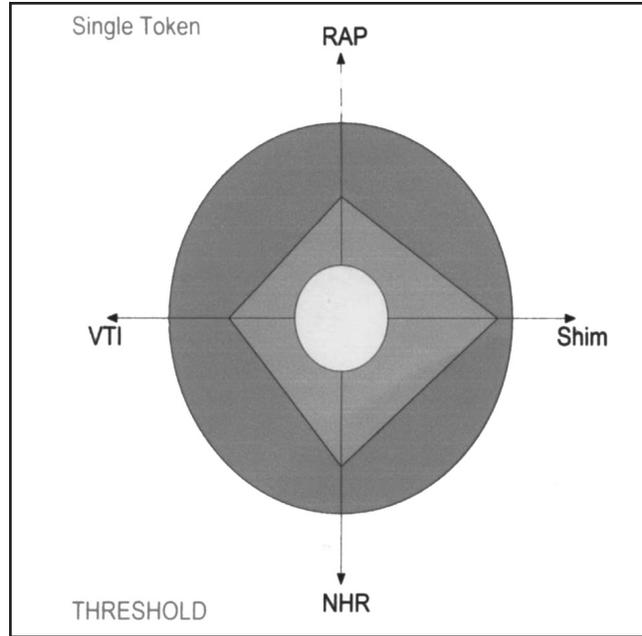


Figure 12-2. Normal voice production on MDVP (clinical illustration by the author of this chapter).

TABLE 12-5. SONA SPEECH MULTIDIMENSIONAL VOICE PROGRAM (PENTAX MEDICAL, N.D.)			
	Adults (Pentax Medical)		Children (Campisi et al., 2002)
	Norms %	Threshold %	Threshold %
Jitter			
Relative average			
Perturbations (RAP)	.378	.680	.75
Shimmer	1.997	3.810	3.35
Noise-to-harmonic ratio	.112	.190	.11
Voice turbulence index	.046	.061	
Fundamental Frequency (Fo)	Norms as per MDVP (Hz)		
	Female 243.973		
	Male 143.233		

the colors red and green but are represented here in differing shades of gray. The shading, which is outside of the circle, indicates jitter/RAP, shimmer, noise-to-harmonic ratio, and/or voice turbulence index. The threshold values obtained are in accordance with the levels of green or red (now in grayscale) on the graphic display (see Figures 12-1 and 12-2). The task should be performed three times for consistency. Table 12-5 displays values that are within normal limits (norms and threshold data) for adults (Pentax Medical). See the Pentax Medical (n.d.) website for further information. Campisi et al. (2002) established norms for children aged 4 to 18 years old.

Sono Speech: Visipitch

The Visipitch (Pentax Medical) can obtain fundamental frequency value, a pitch range, and a display an intonation pattern. The rationale for using this instrument is that the quantitative data obtained can be compared with pitch obtained from informal tasks and provide hard evidence to support perceptual analysis. The client is instructed to take in a normal breath and produces the vowel /a/ into a microphone (held 2 inches from client’s mouth) at a comfortable pitch and loudness level. The waveform appears on the computer screen as the client is sustaining the vowel. The clinician presses the space bar to the end of the phonation,