

**Supplemental Material S3.** Effect size estimates per article.

Acoustic feature	Article	Estimated effect size	Position of 95% credible interval related to the null
F0 variability	Bandini et al. (2015)	-0.31 (-0.95, 0.31)	Null
F0 variability	De Keyser et al. (2016)	-0.86 (-1.43, -0.31)	Negative
F0 variability	Galaz et al. (2016)	-0.47 (-0.69, -0.26)	Negative
F0 variability	Goberman & Elmer (2005)	-0.72 (-1.21, -0.19)	Negative
F0 variability	Goberman et al. (2005)	-0.76 (-1.17, -0.35)	Negative
F0 variability	Harel et al. (2004)	-0.91 (-1.68, -0.22)	Negative
F0 variability	Huh et al. (2015)	-0.6 (-0.93, -0.24)	Negative
F0 variability	Jeancolas et al. (2022)	-0.78 (-0.95, -0.6)	Negative
F0 variability	Lirani-Silva et al. (2015)	-0.63 (-1.21, -0.03)	Negative
F0 variability	Lowit & Kuschmann (2012)	-0.64 (-1.24, 0.01)	Null
F0 variability	Rektorova et al. (2007)	-0.62 (-1.21, 0.04)	Null
F0 variability	Rusz et al. (2011)	-1.18 (-1.54, -0.83)	Negative
F0 variability	Rusz et al. (2017)	-0.93 (-1.4, -0.46)	Negative
F0 variability	Rusz et al. (2022)	-1.2 (-1.5, -0.89)	Negative
F0 variability	Skodda et al. (2011)	-0.78 (-1.19, -0.36)	Negative
F0 variability	Skrabal et al. (2020)	-0.93 (-1.34, -0.51)	Negative
F0 variability	Thies et al. (2020)	-0.49 (-0.99, 0.02)	Null
F0 variability	Tjaden & Wilding (2011a)	-0.89 (-1.47, -0.33)	Negative
F0 variability	Tykalova et al. (2020)	-1.14 (-1.57, -0.7)	Negative
F0 variability	Verkhodanova et al. (2022)	-0.56 (-0.89, -0.22)	Negative
Intensity variability	da Silva et al. (2021)	-0.03 (-0.61, 0.56)	Null
Intensity variability	De Keyser et al. (2016)	-0.42 (-1.09, 0.27)	Null
Intensity variability	Galaz et al. (2016)	0.14 (-0.06, 0.34)	Null
Intensity variability	Jeancolas et al. (2022)	-0.14 (-0.42, 0.14)	Null
Intensity variability	Lam & Tjaden (2016)	-0.83 (-1.52, -0.14)	Negative
Intensity variability	Lirani-Silva et al. (2015)	0.36 (-0.37, 1.08)	Null
Intensity variability	Rektorova et al. (2007)	-0.57 (-1.33, 0.15)	Null
Intensity variability	Rusz et al. (2011)	-0.99 (-1.31, -0.66)	Negative
Intensity variability	Rusz et al. (2017)	0.07 (-0.5, 0.65)	Null
Intensity variability	Rusz et al. (2022)	-0.77 (-1.05, -0.49)	Negative
Intensity variability	Skrabal et al. (2020)	-0.26 (-0.69, 0.18)	Null
Intensity variability	Tykalova et al. (2020)	-0.31 (-0.72, 0.1)	Null
Speech rate	Goberman et al. (2005)	-0.78 (-1.24, -0.38)	Negative
Speech rate	Huh et al. (2015)	-0.13 (-0.47, 0.22)	Null
Speech rate	Lirani-Silva et al. (2015)	-0.04 (-0.79, 0.73)	Null
Speech rate	Lowit & Kuschmann (2012)	-0.55 (-1.07, 0.08)	Null
Speech rate	Skodda et al. (2011)	0.16 (-0.15, 0.47)	Null
Speech rate	Tjaden & Wilding (2005)	-0.45 (-0.95, 0.17)	Null
Speech rate	Tjaden & Wilding (2011b)	-0.63 (-1.16, -0.09)	Negative
Speech rate	Verkhodanova et al. (2022)	-1.12 (-1.48, -0.74)	Negative
Speech rate	Walsh & Smith (2012)	-0.57 (-1.05, -0.06)	Negative
Speech rate	Whitfield & Gravelin (2019)	-0.55 (-1.07, 0.07)	Null
Articulation rate	Bandini et al. (2015)	0.64 (-0.12, 1.32)	Null
Articulation rate	Goberman & Elmer (2005)	-0.24 (-0.8, 0.24)	Null
Articulation rate	Goberman et al. (2005)	-0.28 (-0.74, 0.12)	Null
Articulation rate	Konstantopoulos et al. (2021)	-1.39 (-2.08, -0.53)	Negative
Articulation rate	Lam & Tjaden (2016)	0.28 (-0.36, 1.07)	Null
Articulation rate	Lowit et al. (2018)	-0.23 (-0.82, 0.3)	Null

Articulation rate	McRae et al. (2002)	0.24 (-0.38, 0.99)	Null
Articulation rate	Rusz et al. (2011)	-0.03 (-0.54, 0.49)	Null
Articulation rate	Rusz et al. (2022)	-0.21 (-0.5, 0.07)	Null
Articulation rate	Skodda et al. (2011)	0.03 (-0.27, 0.32)	Null
Articulation rate	Skrabal et al. (2020)	0.13 (-0.32, 0.65)	Null
Articulation rate	Tjaden & Wilding (2004)	-0.22 (-0.83, 0.35)	Null
Articulation rate	Tjaden & Wilding (2011a)	-0.19 (-0.81, 0.39)	Null
Articulation rate	Verkhodanova et al. (2022)	-0.71 (-1.09, -0.31)	Negative
Pause duration	Harel et al. (2004)	0.74 (0.03, 1.54)	Positive
Pause duration	Hlavnicka et al. (2017)	0.73 (0.4, 1.06)	Positive
Pause duration	Huh et al. (2015)	0.16 (-0.19, 0.48)	Null
Pause duration	Jeancolas et al. (2022)	0.48 (0.27, 0.71)	Positive
Pause duration	Rusz et al. (2021)	0.46 (0.12, 0.8)	Positive
Pause duration	Rusz et al. (2022)	0.26 (-0.04, 0.55)	Null
Pause duration	Tjaden & Wilding (2011b)	0.73 (0.19, 1.33)	Positive
Pause duration	Tykalova et al. (2020)	0.45 (0.03, 0.86)	Positive
Pause duration	Whitfield & Gravelin (2019)	0.78 (0.31, 1.31)	Positive
Pause ratio	Goberman & Elmer (2005)	0.32 (-0.5, 1.07)	Null
Pause ratio	Goberman et al. (2005)	0.95 (0.49, 1.43)	Positive
Pause ratio	Rusz et al. (2011)	0.41 (0, 0.82)	Null
Pause ratio	Skodda et al. (2011)	-0.38 (-0.83, 0.08)	Null
Pause ratio	Tjaden & Wilding (2011b)	1 (0.28, 1.74)	Positive
F0	Goberman et al. (2002)	0.44 (0.04, 0.87)	Positive
F0	Lam & Tjaden (2016)	0.29 (-0.3, 0.8)	Null
F0	Rektorova et al. (2007)	0.11 (-0.71, 0.79)	Null
F0	Skodda et al. (2011)	0.25 (-0.07, 0.57)	Null
F0	Tanaka et al. (2011)	0.33 (-0.07, 0.78)	Null
Intensity	da Silva et al. (2021)	-0.3 (-0.84, 0.25)	Null
Intensity	Darling & Huber (2011)	-0.72 (-1.47, -0.04)	Negative
Intensity	De Keyser et al. (2016)	-0.55 (-0.98, -0.15)	Negative
Intensity	Lam & Tjaden (2016)	-0.34 (-0.94, 0.28)	Null
Intensity	Rektorova et al. (2007)	-0.44 (-1.22, 0.3)	Null
Intensity	Rusz et al. (2017)	-0.03 (-0.59, 0.5)	Null
Intensity	Skodda et al. (2010)	-0.53 (-1.09, 0.05)	Null
Intensity	Skrabal et al. (2020)	0.33 (-0.14, 0.8)	Null
Intensity	Thies et al. (2020)	0.19 (-0.26, 0.63)	Null
Intensity	Tjaden & Wilding (2004)	-0.45 (-1.07, 0.18)	Null
Intensity	Tjaden & Wilding (2005)	-0.25 (-0.87, 0.39)	Null
Intensity	Tjaden & Wilding (2011a)	-0.35 (-0.99, 0.29)	Null
Intensity	Walsh & Smith (2012)	-1.02 (-1.75, -0.29)	Negative