

Internal cueing improves gait more than external cueing in healthy adults and people with Parkinson disease

Authors: Elinor C Harrison¹, Adam P Horin¹, and Gammon M Earhart^{1-3,*}

¹Program in Physical Therapy, Washington University School of Medicine, St Louis, Missouri, United States of America

²Department of Neurology, Washington University School of Medicine, St Louis, Missouri, United States of America

³Department of Neuroscience, Washington University School of Medicine, St Louis, Missouri, United States of America

Supplementary Table 1. Means and standard deviations of gait characteristics and variabilities for different cueing conditions, averaged across participants for each group.

	Normalized Velocity (cm/s/leg length)			Cadence (steps/min)			Stride Length (cm)			
	YC	OC	PD	YC	OC	PD	YC	OC	PD	
Forward	Uncued	1.71 (0.21)	1.66 (0.16)	1.53 (0.21)	110.58 (6.74)	112.14 (6.02)	110.90 (7.84)	149.47 (10.31)	143.51 (15.28)	134.08 (15.58)
	Music	1.70 (0.20)	1.69 (0.16)	1.56 (0.20)	110.60 (7.31)	113.28 (6.66)	111.13 (7.71)	148.58 (9.29)	144.34 (12.10)	134.16 (15.66)
	Sing	1.73 (0.22)	1.68 (0.17)	1.56 (0.26)	112.49 (7.89)	114.43 (7.62)	112.72 (8.63)	147.93 (10.16)	142.15 (13.22)	133.02 (17.23)
Backward	Uncued	1.32 (0.22)	1.17 (0.19)	0.99 (0.23)	107.29 (9.19)	110.86 (9.46)	112.30 (9.93)	118.72 (13.36)	102.77 (16.47)	83.48 (21.55)
	Music	1.33 (0.21)	1.26 (0.21)	1.07 (0.22)	107.24 (9.12)	110.72 (9.44)	112.96 (10.43)	119.83 (12.33)	109.67 (15.88)	90.45 (20.35)
	Sing	1.41 (0.21)	1.28 (0.21)	1.10 (0.22)	110.71 (8.68)	112.89 (9.54)	115.54 (10.02)	123.38 (13.14)	109.86 (17.04)	91.15 (20.90)
	Stride Length CV			Stride Time CV			Single Support Time CV			
	YC	OC	PD	YC	OC	PD	YC	OC	PD	
Forward	Uncued	1.83 (0.77)	2.18 (0.67)	2.73 (1.43)	1.73 (0.59)	2.19 (0.82)	2.24 (0.71)	2.55 (0.75)	3.19 (1.07)	3.78 (1.09)
	Music	2.77 (1.19)	2.79 (1.32)	4.07 (2.59)	2.25 (0.85)	2.32 (1.05)	2.45 (0.77)	3.43 (1.17)	3.78 (1.77)	4.32 (1.58)
	Sing	2.04 (0.84)	2.35 (1.04)	2.52 (0.93)	1.65 (0.61)	1.86 (0.57)	2.02 (0.66)	3.02 (0.79)	3.18 (0.71)	3.82 (1.25)
Backward	Uncued	4.33 (1.44)	6.11 (2.38)	7.77 (2.99)	3.11 (0.97)	3.84 (1.28)	4.15 (1.54)	5.03 (1.18)	5.97 (1.68)	7.14 (2.70)
	Music	5.35 (2.14)	6.18 (2.35)	7.59 (2.54)	3.27 (1.89)	3.01 (0.86)	3.63 (1.89)	5.29 (2.36)	5.44 (1.79)	6.63 (2.83)
	Sing	4.19 (1.42)	5.65 (2.03)	7.12 (2.97)	2.81 (0.71)	2.64 (0.86)	3.25 (1.19)	4.56 (1.12)	4.99 (1.45)	5.99 (1.98)

See figures for significance.