lme_mods

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Packages & Setup

```
# install.packages(c("tidyverse","purrr","R.matlab","readxl","dplyr"))
library(readxl);
library(purrr)
library(tidyverse);
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## v forcats   1.0.0     v stringr   1.5.1
## v ggplot2   3.5.0     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.1
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
library(tibble)
library(knitr);
library(gtsummary)
library(kableExtra)
```

```
##
## Attaching package: 'kableExtra'
##
## The following object is masked from 'package:dplyr':
##
##     group_rows
```

```
library(lme4)
```

```
## Loading required package: Matrix
##
## Attaching package: 'Matrix'
##
## The following objects are masked from 'package:tidyr':
##
##     expand, pack, unpack
```

GTSUMMARY THEME

```
# my_theme <-
#   list(
#     "tbl_summary-str:default_con_type" = "continuous2",
#     "tbl_summary-str:continuous_stat" = c(
#       "{median} ({p25} - {p75})",
#       "{mean} ({sd})",
#       "{min} - {max}"
#     ),
#     "tbl_summary-str:categorical_stat" = "{n} / {N} ({p}%)",
#     "style_number-arg:big.mark" = "",
#     "tbl_summary-fn:percent_fun" = function(x) style_percent(x, digits = 3)
#   )
# my_theme <-
#   list()
# gtsummary::set_gtsummary_theme(my_theme)
gtsummary::set_gtsummary_theme(theme_gtsummary_journal("jama"))
```

```
## Setting theme `JAMA`
## Setting theme `JAMA`
```

```
# reset_gtsummary_theme()
```

load table

```
# excel_dir <-"M:/jsalminen/GitHub/par_EEGProcessing/src/_data/MIM_dataset/_studies/04162024_MIM_YAOAN8
excel_dir <-"M:/jsalminen/GitHub/par_EEGProcessing/src/_data/MIM_dataset/_studies/04232024_MIM_YAOAN89_a
eegt <- read_excel(excel_dir,sheet="Sheet1")
```

get unique entries

```
clusters = unique(eegt$cluster_id);
subjects = unique(eegt$subj_char);
groups = unique(eegt$group_char);
kin_measures = c('mean_APexc_COV','mean_APexc_mean','mean_MLexc_COV','mean_MLexc_mean','mean_StepDur','m
eeg_measures = c('theta_avg_power','alpha_avg_power','beta_avg_power','aperiodic_exp','aperiodic_offset
```

get speeds only

```
eegt <- filter_at(eegt,vars('cond_char'), any_vars(. %in% c('0.25','0.5','0.75','1.0')))
flat_speeds = unique(eegt$cond_char)
eegt$cond_char <- as.numeric(eegt$cond_char)
eegt$speed_cond_num <- as.numeric(eegt$cond_char)
eegt <- mutate(eegt,across(c('subj_char'), factor))
```

Cluster:	3								
	EEG Theta			EEG Alpha			EEG Beta		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.63 (0.37 to 0.89)	<0.001	<0.001	1.4 (0.59 to 2.2)	<0.001	0.002	1.2 (0.70 to 1.6)	<0.001	<0.001
speed_cond_num	0.15 (0.04 to 0.26)	0.007	0.010	-0.24 (-0.42 to -0.07)	0.006	0.009	-0.29 (-0.39 to -0.19)	<0.001	<0.001
group_char		0.027	0.027		0.82	0.82		0.44	0.44
H1000's	—			—			—		
H2000's	-0.51 (-0.88 to -0.14)			0.37 (-0.83 to 1.6)			0.37 (-0.29 to 1.0)		
H3000's	-0.18 (-0.56 to 0.19)			0.29 (-0.91 to 1.5)			-0.03 (-0.68 to 0.63)		
subj_char.sd___(Intercept)	0.56 (NA to NA)			1.8 (NA to NA)			1.0 (NA to NA)		
Residual.sd___Observation	0.23 (NA to NA)			0.36 (NA to NA)			0.21 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

get terrains only (if applicable)

```
# eegt <- filter_at(eegt,vars('cond_char'), any_vars(. %in% c('flat','low','med','high')))
# eegt <- filter_at(eegt,vars('cond_char'), any_vars(. %in% c('high')))
# eegt$terr_ord_speed <- cut(eegt$speed_ms, 4, ordered = TRUE)
```

convert speeds to ordered & groups to factors

```
eegt <- mutate(eegt,across(c('group_char'), factor))
eegt$speed_ord <- cut(eegt$cond_char, 4, ordered = TRUE)
eegt <- mutate(eegt,across(c('cond_char'), factor))
head(eegt)
```

```
## # A tibble: 6 x 139
##   speed_ms subj_id subj_cl_ind subj_char comp_id design_id cond_id cond_char
##      <dbl> <chr>         <dbl> <fct>       <dbl> <chr>     <chr>   <fct>
## 1     1.2  5                 1 H1011           4 2         1       0.25
## 2     0.69 8                 2 H1017           3 2         1       0.25
## 3     0.51 10                3 H1019           4 2         1       0.25
## 4     0.76 11                4 H1020           6 2         1       0.25
## 5     0.59 12                5 H1022           6 2         1       0.25
## 6     0.8  15                6 H1027           3 2         1       0.25
## # i 131 more variables: group_id <chr>, cluster_id <chr>, aperiodic_exp <dbl>,
## #   aperiodic_offset <dbl>, central_freq_1 <dbl>, central_freq_2 <dbl>,
## #   central_freq_3 <dbl>, power_1 <dbl>, power_2 <dbl>, power_3 <dbl>,
## #   r_squared <dbl>, theta_avg_power <dbl>, alpha_avg_power <dbl>,
## #   beta_avg_power <dbl>, theta_1 <dbl>, theta_2 <dbl>, theta_3 <dbl>,
## #   theta_4 <dbl>, theta_5 <dbl>, theta_6 <dbl>, theta_7 <dbl>, theta_8 <dbl>,
## #   'alpha_ 1' <dbl>, 'alpha_ 2' <dbl>, 'alpha_ 3' <dbl>, 'alpha_ 4' <dbl>, ...
```

```
eegt$group_speed_code = paste(eegt$group_char,eegt$cond_char,sep="_")
```

LME EEG ~ 1+speed+group

LME KIN ~ 1+speed+group+speed:group

Cluster:	4								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.43 (0.09 to 0.77)	0.013	0.039	4.2 (3.1 to 5.2)	<0.001	<0.001	2.7 (2.1 to 3.2)	<0.001	<0.001
speed_cond_num	0.04 (-0.07 to 0.15)	0.45	0.51	-0.68 (-0.96 to -0.40)	<0.001	<0.001	-0.46 (-0.61 to -0.31)	<0.001	<0.001
group_char		0.51	0.51		0.64	0.64		0.17	0.17
H1000's	—			—			—		
H2000's	-0.32 (-0.86 to 0.23)			-0.17 (-1.9 to 1.5)			0.82 (-0.08 to 1.7)		
H3000's	-0.16 (-0.64 to 0.32)			-0.71 (-2.2 to 0.80)			0.52 (-0.28 to 1.3)		
subj_char.sd___(Intercept)	0.81 (NA to NA)			2.5 (NA to NA)			1.4 (NA to NA)		
Residual.sd___Observation	0.24 (NA to NA)			0.61 (NA to NA)			0.33 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	5								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.68 (0.34 to 1.0)	<0.001	<0.001	2.5 (1.5 to 3.5)	<0.001	<0.001	2.2 (1.4 to 3.0)	<0.001	<0.001
speed_cond_num	0.23 (0.10 to 0.36)	<0.001	<0.001	-0.28 (-0.51 to -0.04)	0.021	0.032	-0.32 (-0.47 to -0.16)	<0.001	<0.001
group_char		0.063	0.063		0.58	0.58		0.067	0.067
H1000's	—			—			—		
H2000's	-0.50 (-1.0 to 0.01)			-0.84 (-2.4 to 0.75)			0.54 (-0.71 to 1.8)		
H3000's	-0.49 (-0.96 to -0.03)			-0.26 (-1.7 to 1.2)			1.3 (0.21 to 2.5)		
subj_char.sd___(Intercept)	0.75 (NA to NA)			2.4 (NA to NA)			1.9 (NA to NA)		
Residual.sd___Observation	0.28 (NA to NA)			0.51 (NA to NA)			0.34 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	6								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.46 (0.11 to 0.81)	0.011	0.016	4.8 (4.0 to 5.6)	<0.001	<0.001	2.7 (2.3 to 3.1)	<0.001	<0.001
speed_cond_num	-0.12 (-0.28 to 0.04)	0.14	0.14	-0.53 (-0.79 to -0.27)	<0.001	<0.001	-0.22 (-0.35 to -0.08)	0.002	0.002
group_char		<0.001	<0.001		0.070	0.070		0.006	0.006
H1000's	—			—			—		
H2000's	0.66 (0.16 to 1.2)			-1.2 (-2.4 to -0.05)			-0.67 (-1.3 to -0.05)		
H3000's	1.2 (0.77 to 1.7)			-1.0 (-2.1 to 0.03)			-0.92 (-1.5 to -0.34)		
subj_char.sd___(Intercept)	0.85 (NA to NA)			2.0 (NA to NA)			1.1 (NA to NA)		
Residual.sd___Observation	0.39 (NA to NA)			0.64 (NA to NA)			0.33 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	7								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.29 (0.03 to 0.55)	0.027	0.040	3.5 (2.4 to 4.6)	<0.001	<0.001	3.1 (2.5 to 3.7)	<0.001	<0.001
speed_cond_num	0.16 (0.06 to 0.26)	0.001	0.003	-0.52 (-0.84 to -0.20)	0.001	0.002	-0.51 (-0.68 to -0.34)	<0.001	<0.001
group_char		0.10	0.10		0.62	0.62		0.030	0.030
H1000's	—			—			—		
H2000's	-0.44 (-0.85 to -0.03)			-0.88 (-2.6 to 0.89)			0.87 (-0.14 to 1.9)		
H3000's	-0.24 (-0.60 to 0.13)			-0.37 (-1.9 to 1.2)			1.2 (0.28 to 2.1)		
subj_char.sd___(Intercept)	0.63 (NA to NA)			2.7 (NA to NA)			1.6 (NA to NA)		
Residual.sd___Observation	0.22 (NA to NA)			0.73 (NA to NA)			0.38 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	8								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.86 (0.47 to 1.3)	<0.001	<0.001	1.4 (0.80 to 2.0)	<0.001	<0.001	0.82 (0.31 to 1.3)	0.002	0.002
speed_cond_num	0.38 (0.24 to 0.53)	<0.001	<0.001	-0.19 (-0.44 to 0.06)	0.14	0.14	-0.19 (-0.31 to -0.08)	<0.001	0.002
group_char		0.068	0.068		0.052	0.078		0.041	0.041
H1000's	—			—			—		
H2000's	-0.62 (-1.2 to -0.07)			-0.32 (-1.2 to 0.52)			0.51 (-0.21 to 1.2)		
H3000's	-0.48 (-1.0 to 0.09)			0.74 (-0.12 to 1.6)			0.96 (0.21 to 1.7)		
subj_char.sd___(Intercept)	0.84 (NA to NA)			1.3 (NA to NA)			1.1 (NA to NA)		
Residual.sd___Observation	0.29 (NA to NA)			0.51 (NA to NA)			0.24 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	9								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.50 (0.23 to 0.77)	<0.001	<0.001	2.8 (1.8 to 3.8)	<0.001	<0.001	1.6 (1.0 to 2.2)	<0.001	<0.001
speed_cond_num	0.25 (0.10 to 0.39)	<0.001	0.001	-0.21 (-0.47 to 0.05)	0.12	0.14	-0.24 (-0.36 to -0.11)	<0.001	<0.001
group_char		0.41	0.41		0.14	0.14		0.24	0.24
H1000's	—			—			—		
H2000's	-0.22 (-0.61 to 0.16)			0.18 (-1.4 to 1.7)			0.74 (-0.13 to 1.6)		
H3000's	-0.23 (-0.63 to 0.17)			-1.4 (-2.9 to 0.22)			0.19 (-0.72 to 1.1)		
subj_char.sd___(Intercept)	0.61 (NA to NA)			2.5 (NA to NA)			1.4 (NA to NA)		
Residual.sd___Observation	0.31 (NA to NA)			0.56 (NA to NA)			0.27 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	10								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	1.3 (0.92 to 1.7)	<0.001	<0.001	0.69 (0.30 to 1.1)	<0.001	0.002	1.4 (0.94 to 1.8)	<0.001	<0.001
speed_cond_num	0.26 (0.10 to 0.42)	0.001	0.002	0.01 (-0.15 to 0.16)	0.91	0.91	-0.23 (-0.33 to -0.14)	<0.001	<0.001
group_char		0.081	0.081		0.76	0.91		0.69	0.69
H1000's	—			—			—		
H2000's	-0.62 (-1.2 to -0.05)			0.12 (-0.46 to 0.70)			0.29 (-0.38 to 0.95)		
H3000's	-0.47 (-1.1 to 0.14)			-0.12 (-0.74 to 0.49)			0.15 (-0.56 to 0.86)		
subj_char.sd___(Intercept)	0.96 (NA to NA)			0.97 (NA to NA)			1.1 (NA to NA)		
Residual.sd___Observation	0.35 (NA to NA)			0.35 (NA to NA)			0.21 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	11								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.45 (0.01 to 0.89)	0.047	0.14	3.7 (2.5 to 4.8)	<0.001	<0.001	1.9 (1.4 to 2.5)	<0.001	<0.001
speed_cond_num	0.05 (-0.08 to 0.19)	0.44	0.44	-0.42 (-0.73 to -0.11)	0.008	0.013	-0.24 (-0.42 to -0.07)	0.007	0.010
group_char		0.19	0.29		0.40	0.40		0.44	0.44
H1000's	—			—			—		
H2000's	-0.20 (-0.86 to 0.46)			-1.1 (-2.8 to 0.67)			-0.34 (-1.1 to 0.46)		
H3000's	0.41 (-0.22 to 1.0)			0.02 (-1.6 to 1.7)			-0.49 (-1.3 to 0.28)		
subj_char.sd___(Intercept)	0.90 (NA to NA)			2.4 (NA to NA)			1.1 (NA to NA)		
Residual.sd___Observation	0.26 (NA to NA)			0.60 (NA to NA)			0.34 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	12								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.56 (0.24 to 0.88)	<0.001	0.002	1.9 (0.91 to 2.8)	<0.001	<0.001	0.98 (0.52 to 1.4)	<0.001	<0.001
speed_cond_num	0.01 (-0.13 to 0.16)	0.85	0.92	-0.35 (-0.60 to -0.11)	0.005	0.007	-0.15 (-0.25 to -0.04)	0.008	0.012
group_char		0.92	0.92		0.053	0.053		0.71	0.71
H1000's	—			—			—		
H2000's	0.10 (-0.39 to 0.58)			1.6 (0.15 to 3.1)			-0.02 (-0.73 to 0.70)		
H3000's	0.02 (-0.41 to 0.46)			1.3 (-0.02 to 2.7)			-0.25 (-0.89 to 0.39)		
subj_char.sd___(Intercept)	0.63 (NA to NA)			2.0 (NA to NA)			0.94 (NA to NA)		
Residual.sd___Observation	0.27 (NA to NA)			0.46 (NA to NA)			0.20 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	13								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.01 (-0.28 to 0.30)	0.94	0.94	2.8 (1.8 to 3.7)	<0.001	<0.001	1.3 (0.87 to 1.7)	<0.001	<0.001
speed_cond_num	0.33 (0.17 to 0.49)	<0.001	<0.001	-0.35 (-0.67 to -0.03)	0.030	0.045	-0.17 (-0.34 to 0.00)	0.053	0.080
group_char		0.094	0.14		0.46	0.46		0.17	0.17
H1000's	—			—			—		
H2000's	0.40 (-0.15 to 0.96)			-0.85 (-2.8 to 1.1)			0.01 (-0.83 to 0.84)		
H3000's	0.45 (0.01 to 0.89)			-0.88 (-2.4 to 0.65)			-0.61 (-1.3 to 0.06)		
subj_char.sd___(Intercept)	0.64 (NA to NA)			2.3 (NA to NA)			0.97 (NA to NA)		
Residual.sd___Observation	0.30 (NA to NA)			0.59 (NA to NA)			0.32 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	14								
	EEG Theta			**EEG Alpha**			**EEG Beta**		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	0.42 (0.09 to 0.75)	0.012	0.036	4.4 (3.5 to 5.3)	<0.001	<0.001	2.8 (2.2 to 3.3)	<0.001	<0.001
speed_cond_num	0.09 (0.01 to 0.17)	0.034	0.050	-0.28 (-0.52 to -0.04)	0.021	0.032	-0.18 (-0.32 to -0.04)	0.010	0.014
group_char		0.58	0.58		0.43	0.43		0.74	0.74
H1000's	—			—			—		
H2000's	-0.20 (-0.70 to 0.31)			-0.91 (-2.4 to 0.54)			-0.23 (-1.0 to 0.57)		
H3000's	0.08 (-0.41 to 0.57)			-0.66 (-2.1 to 0.74)			0.10 (-0.67 to 0.87)		
subj_char.sd__(Intercept)	0.84 (NA to NA)			2.4 (NA to NA)			1.3 (NA to NA)		
Residual.sd__Observation	0.18 (NA to NA)			0.55 (NA to NA)			0.31 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	3														
	APexc COV			APexc			MLexc COV			MLexc			Step Dur		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	18 (15 to 21)	<0.001	<0.001	0.08 (0.08 to 0.09)	<0.001	<0.001	12 (9.3 to 14)	<0.001	<0.001	0.13 (0.12 to 0.14)	<0.001	<0.001	1.6 (1.5 to 1.7)	<0.001	<0.001
speed_cond_num	-3.7 (-7.2 to -0.16)	0.041	0.054	-0.05 (-0.05 to -0.04)	<0.001	<0.001	4.2 (1.4 to 7.0)	0.003	0.007	-0.07 (-0.08 to -0.06)	<0.001	<0.001	-1.1 (-1.2 to -0.97)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		0.040	0.040		0.007	0.007		<0.001	<0.001
H1000's	—			—			—			—			—		
H2000's	6.3 (2.1 to 10)			-0.03 (-0.03 to -0.02)			-4.3 (-7.7 to -0.99)			0.03 (0.01 to 0.05)			-0.44 (-0.55 to -0.34)		
H3000's	12 (8.2 to 16)			-0.04 (-0.05 to -0.03)			-1.9 (-5.2 to 1.5)			0.00 (-0.02 to 0.02)			-0.67 (-0.77 to -0.56)		
speed_cond_num * group_char		0.20	0.20		<0.001	<0.001		0.011	0.014		0.002	0.002		<0.001	<0.001
speed_cond_num * H2000's	1.2 (-4.0 to 6.4)			0.02 (0.01 to 0.04)			6.4 (2.2 to 11)			-0.03 (-0.05 to -0.01)			0.45 (0.30 to 0.59)		
speed_cond_num * H3000's	-3.6 (-8.7 to 1.6)			0.03 (0.02 to 0.04)			2.6 (-1.6 to 6.8)			0.00 (-0.02 to 0.01)			0.64 (0.50 to 0.79)		
subj_char.sd__(Intercept)	3.3 (NA to NA)			0.01 (NA to NA)			2.7 (NA to NA)			0.02 (NA to NA)			0.07 (NA to NA)		
Residual.sd__Observation	4.5 (NA to NA)			0.01 (NA to NA)			3.6 (NA to NA)			0.02 (NA to NA)			0.13 (NA to NA)		

Cluster:	3														
	UDexc COV			UDexc			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	22 (21 to 24)	<0.001	<0.001	0.01 (0.00 to 0.01)	<0.001	<0.001	2.4 (2.3 to 2.5)	<0.001	<0.001	3.2 (3.0 to 3.3)	<0.001	<0.001	0.00 (-0.03 to 0.03)	0.95	0.95
speed_cond_num	-16 (-18 to -14)	<0.001	<0.001	0.03 (0.03 to 0.03)	<0.001	<0.001	-1.8 (-1.9 to -1.6)	<0.001	<0.001	-2.1 (-2.3 to -1.9)	<0.001	<0.001	0.38 (0.36 to 0.41)	<0.001	<0.001
group_char		0.28	0.28		0.94	0.94		<0.001	<0.001		<0.001	<0.001		0.47	0.64
H1000's	—			—			—			—			—		
H2000's	1.0 (-1.4 to 3.4)			0.00 (0.00 to 0.00)			-0.68 (-0.86 to -0.50)			-0.89 (-1.1 to -0.67)			0.01 (-0.02 to 0.05)		
H3000's	-1.0 (-3.4 to 1.4)			0.00 (0.00 to 0.00)			-1.0 (-1.2 to -0.84)			-1.3 (-1.6 to -1.1)			0.02 (-0.01 to 0.06)		
speed_cond_num * group_char		0.047	0.063		0.58	0.78		<0.001	<0.001		<0.001	<0.001		0.48	0.64
speed_cond_num * H2000's	0.42 (-2.5 to 3.3)			0.00 (0.00 to 0.01)			0.71 (0.46 to 0.96)			0.90 (0.61 to 1.2)			0.02 (-0.02 to 0.06)		
speed_cond_num * H3000's	3.4 (0.52 to 6.3)			0.00 (0.00 to 0.01)			1.0 (0.78 to 1.3)			1.3 (1.0 to 1.6)			0.02 (-0.02 to 0.06)		
subj_char.sd__(Intercept)	2.0 (NA to NA)			0.00 (NA to NA)			0.08 (NA to NA)			0.13 (NA to NA)			0.04 (NA to NA)		
Residual.sd__Observation	2.5 (NA to NA)			0.00 (NA to NA)			0.22 (NA to NA)			0.25 (NA to NA)			0.04 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	4														
	APexc COV			APexc			MLexc COV			MLexc			Step Dur		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	18 (15 to 21)	<0.001	<0.001	0.08 (0.08 to 0.09)	<0.001	<0.001	11 (9.1 to 14)	<0.001	<0.001	0.12 (0.11 to 0.14)	<0.001	<0.001	1.5 (1.5 to 1.6)	<0.001	<0.001
speed_cond_num	-3.1 (-6.3 to 0.01)	0.050	0.067	-0.04 (-0.05 to -0.04)	<0.001	<0.001	5.0 (2.4 to 7.6)	<0.001	<0.001	-0.07 (-0.08 to -0.06)	<0.001	<0.001	-1.0 (-1.1 to -0.93)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		0.13	0.13		<0.001	<0.001		<0.001	<0.001
H1000's	—			—			—			—			—		
H2000's	6.7 (2.4 to 11)			-0.02 (-0.03 to -0.01)			-3.7 (-7.3 to -0.07)			0.04 (0.02 to 0.06)			-0.37 (-0.48 to -0.26)		
H3000's	9.7 (5.9 to 13)			-0.03 (-0.04 to -0.02)			-0.81 (-4.0 to 2.4)			0.01 (-0.01 to 0.02)			-0.56 (-0.66 to -0.46)		
speed_cond_num * group_char		0.79	0.79		<0.001	<0.001		0.047	0.062		<0.001	<0.001		<0.001	<0.001
speed_cond_num * H2000's	-1.0 (-6.1 to 4.1)			0.01 (0.00 to 0.03)			4.8 (0.61 to 9.0)			-0.04 (-0.06 to -0.02)			0.37 (0.23 to 0.52)		
speed_cond_num * H3000's	-1.6 (-6.1 to 3.0)			0.03 (0.02 to 0.04)			0.00 (-3.8 to 3.8)			-0.01 (-0.02 to 0.01)			0.54 (0.40 to 0.67)		
subj_char.sd__(Intercept)	3.7 (NA to NA)			0.01 (NA to NA)			3.3 (NA to NA)			0.02 (NA to NA)			0.07 (NA to NA)		
Residual.sd__Observation	4.3 (NA to NA)			0.01 (NA to NA)			3.5 (NA to NA)			0.02 (NA to NA)			0.12 (NA to NA)		

Cluster:	4														
	UDexc COV			UDexc			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	23 (21 to 24)	<0.001	<0.001	0.01 (0.01 to 0.01)	<0.001	<0.001	2.3 (2.2 to 2.4)	<0.001	<0.001	3.1 (3.0 to 3.2)	<0.001	<0.001	0.01 (-0.01 to 0.04)	0.42	0.73
speed_cond_num	-16 (-18 to -14)	<0.001	<0.001	0.03 (0.02 to 0.03)	<0.001	<0.001	-1.7 (-1.9 to -1.5)	<0.001	<0.001	-2.0 (-2.2 to -1.9)	<0.001	<0.001	0.37 (0.34 to 0.39)	<0.001	<0.001
group_char		0.68	0.68		0.58	0.58		<0.001	<0.001		<0.001	<0.001		0.86	0.86
H1000's	—			—			—			—			—		
H2000's	0.62 (-2.2 to 3.4)			0.00 (-0.01 to 0.00)			-0.58 (-0.76 to -0.39)			-0.74 (-0.96 to -0.52)			0.01 (-0.03 to 0.05)		
H3000's	-0.65 (-3.2 to 1.9)			0.00 (-0.01 to 0.00)			-0.86 (-1.0 to -0.70)			-1.1 (-1.3 to -0.92)			0.01 (-0.03 to 0.05)		
speed_cond_num * group_char		0.065	0.086		0.33	0.43		<0.001	<0.001		<0.001	<0.001		0.55	0.73
speed_cond_num * H2000's	-0.37 (-3.8 to 3.1)			0.00 (0.00 to 0.01)			0.60 (0.34 to 0.85)			0.74 (0.45 to 1.0)			0.02 (-0.02 to 0.06)		
speed_cond_num * H3000's	3.2 (0.09 to 6.2)			0.00 (0.00 to 0.01)			0.87 (0.64 to 1.1)			1.1 (0.81 to 1.3)			0.02 (-0.02 to 0.06)		
subj_char.sd__(Intercept)	2.3 (NA to NA)			0.00 (NA to NA)			0.08 (NA to NA)			0.14 (NA to NA)			0.04 (NA to NA)		
Residual.sd__Observation	2.9 (NA to NA)			0.00 (NA to NA)			0.22 (NA to NA)			0.25 (NA to NA)			0.04 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	5														
	APexc COV			APexc			MLexc COV			MLexc			Step Dur		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	17 (15 to 20)	<0.001	<0.001	0.08 (0.08 to 0.09)	<0.001	<0.001	11 (8.7 to 14)	<0.001	<0.001	0.12 (0.11 to 0.14)	<0.001	<0.001	1.6 (1.5 to 1.7)	<0.001	<0.001
speed_cond_num	-2.7 (-6.0 to 0.68)	0.12	0.16	-0.05 (-0.05 to -0.04)	<0.001	<0.001	6.3 (3.1 to 9.5)	<0.001	<0.001	-0.07 (-0.08 to -0.06)	<0.001	<0.001	-1.1 (-1.2 to -0.97)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		0.20	0.23		<0.001	<0.001		<0.001	<0.001
H1000's	—			—			—			—			—		
H2000's	7.4 (3.3 to 12)			-0.02 (-0.03 to -0.01)			-3.5 (-7.4 to 0.50)			0.04 (0.02 to 0.06)			-0.44 (-0.55 to -0.33)		
H3000's	11 (6.8 to 14)			-0.03 (-0.04 to -0.02)			-0.63 (-4.2 to 3.0)			0.01 (-0.01 to 0.03)			-0.57 (-0.66 to -0.47)		
speed_cond_num * group_char		0.48	0.48		<0.001	<0.001		0.23	0.23		0.002	0.002		<0.001	<0.001
speed_cond_num * H2000's	-2.0 (-7.2 to 3.2)			0.02 (0.01 to 0.03)			3.6 (-1.3 to 8.5)			-0.03 (-0.05 to -0.01)			0.45 (0.31 to 0.60)		
speed_cond_num * H3000's	-2.9 (-7.6 to 1.9)			0.02 (0.01 to 0.04)			-0.41 (-4.9 to 4.1)			-0.01 (-0.03 to 0.01)			0.55 (0.42 to 0.69)		
subj_char.sd__(Intercept)	3.3 (NA to NA)			0.01 (NA to NA)			3.2 (NA to NA)			0.02 (NA to NA)			0.06 (NA to NA)		
Residual.sd__Observation	4.4 (NA to NA)			0.01 (NA to NA)			4.1 (NA to NA)			0.02 (NA to NA)			0.12 (NA to NA)		

Cluster:	5														
	UDexc COV			UDexc			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	22 (20 to 23)	<0.001	<0.001	0.01 (0.01 to 0.01)	<0.001	<0.001	2.4 (2.2 to 2.5)	<0.001	<0.001	3.2 (3.0 to 3.3)	<0.001	<0.001	0.01 (-0.01 to 0.03)	0.42	0.56
speed_cond_num	-15 (-17 to -13)	<0.001	<0.001	0.02 (0.02 to 0.03)	<0.001	<0.001	-1.8 (-1.9 to -1.6)	<0.001	<0.001	-2.1 (-2.3 to -1.9)	<0.001	<0.001	0.36 (0.34 to 0.39)	<0.001	<0.001
group_char		0.083	0.10		0.34	0.34		<0.001	<0.001		<0.001	<0.001		0.69	0.69
H1000's	—			—			—			—			—		
H2000's	3.1 (0.35 to 5.7)			0.00 (-0.01 to 0.00)			-0.69 (-0.87 to -0.51)			-0.88 (-1.1 to -0.67)			0.00 (-0.04 to 0.03)		
H3000's	0.97 (-1.5 to 3.4)			0.00 (-0.01 to 0.00)			-0.85 (-1.0 to -0.68)			-1.1 (-1.3 to -0.94)			0.01 (-0.02 to 0.04)		
speed_cond_num * group_char		0.10	0.10		0.024	0.031		<0.001	<0.001		<0.001	<0.001		0.083	0.17
speed_cond_num * H2000's	-2.6 (-6.0 to 0.83)			0.01 (0.00 to 0.01)			0.73 (0.47 to 0.98)			0.90 (0.61 to 1.2)			0.04 (0.00 to 0.08)		
speed_cond_num * H3000's	1.1 (-2.0 to 4.2)			0.00 (0.00 to 0.01)			0.87 (0.64 to 1.1)			1.1 (0.84 to 1.4)			0.01 (-0.02 to 0.05)		
subj_char.sd__(Intercept)	2.0 (NA to NA)			0.00 (NA to NA)			0.07 (NA to NA)			0.11 (NA to NA)			0.03 (NA to NA)		
Residual.sd__Observation	2.9 (NA to NA)			0.00 (NA to NA)			0.22 (NA to NA)			0.25 (NA to NA)			0.03 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	6														
	APexc COV			APexc			MLexc COV			MLexc			Step Dur		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	18 (16 to 21)	<0.001	<0.001	0.08 (0.08 to 0.09)	<0.001	<0.001	11 (9.1 to 13)	<0.001	<0.001	0.13 (0.12 to 0.14)	<0.001	<0.001	1.6 (1.5 to 1.6)	<0.001	<0.001
speed_cond_num	-3.8 (-6.9 to -0.62)	0.019	0.025	-0.04 (-0.05 to -0.04)	<0.001	<0.001	5.0 (2.6 to 7.5)	<0.001	<0.001	-0.07 (-0.08 to -0.06)	<0.001	<0.001	-1.0 (-1.1 to -0.96)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		0.008	0.008		<0.001	<0.001		<0.001	<0.001
H1000's	—			—			—			—			—		
H2000's	6.0 (2.1 to 9.8)			-0.02 (-0.03 to -0.01)			-4.0 (-6.9 to -1.1)			0.03 (0.02 to 0.05)			-0.43 (-0.52 to -0.34)		
H3000's	9.6 (6.0 to 13)			-0.03 (-0.04 to -0.02)			0.02 (-2.7 to 2.7)			0.01 (-0.01 to 0.02)			-0.57 (-0.66 to -0.49)		
speed_cond_num * group_char		0.62	0.62		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001
speed_cond_num * H2000's	1.4 (-3.3 to 6.1)			0.02 (0.01 to 0.03)			7.3 (3.6 to 11)			-0.04 (-0.05 to -0.02)			0.42 (0.30 to 0.54)		
speed_cond_num * H3000's	-0.86 (-5.3 to 3.5)			0.02 (0.01 to 0.03)			-0.04 (-3.4 to 3.4)			-0.01 (-0.02 to 0.01)			0.55 (0.43 to 0.66)		
subj_char.sd__(Intercept)	3.7 (NA to NA)			0.01 (NA to NA)			2.6 (NA to NA)			0.02 (NA to NA)			0.06 (NA to NA)		
Residual.sd__Observation	4.6 (NA to NA)			0.01 (NA to NA)			3.5 (NA to NA)			0.02 (NA to NA)			0.12 (NA to NA)		

Cluster:	6														
	UDexc COV			UDexc			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	23 (21 to 24)	<0.001	<0.001	0.01 (0.00 to 0.01)	<0.001	<0.001	2.3 (2.2 to 2.4)	<0.001	<0.001	3.1 (3.0 to 3.3)	<0.001	<0.001	0.00 (-0.02 to 0.03)	0.79	0.79
speed_cond_num	-16 (-18 to -14)	<0.001	<0.001	0.03 (0.02 to 0.03)	<0.001	<0.001	-1.7 (-1.9 to -1.6)	<0.001	<0.001	-2.1 (-2.2 to -1.9)	<0.001	<0.001	0.37 (0.35 to 0.39)	<0.001	<0.001
group_char		0.27	0.27		0.54	0.54		<0.001	<0.001		<0.001	<0.001		0.35	0.47
H1000's	—			—			—			—			—		
H2000's	1.4 (-0.90 to 3.6)			0.00 (0.00 to 0.00)			-0.65 (-0.80 to -0.50)			-0.86 (-1.0 to -0.67)			0.00 (-0.04 to 0.03)		
H3000's	-0.45 (-2.6 to 1.7)			0.00 (0.00 to 0.00)			-0.86 (-1.0 to -0.72)			-1.1 (-1.3 to -0.98)			0.02 (-0.01 to 0.05)		
speed_cond_num * group_char		0.020	0.026		0.15	0.20		<0.001	<0.001		<0.001	<0.001		0.048	0.10
speed_cond_num * H2000's	-0.40 (-3.2 to 2.4)			0.00 (0.00 to 0.01)			0.66 (0.44 to 0.87)			0.83 (0.59 to 1.1)			0.04 (0.01 to 0.08)		
speed_cond_num * H3000's	3.1 (0.48 to 5.8)			0.00 (0.00 to 0.00)			0.87 (0.67 to 1.1)			1.1 (0.87 to 1.3)			0.01 (-0.03 to 0.04)		
subj_char.sd__(Intercept)	2.1 (NA to NA)			0.00 (NA to NA)			0.07 (NA to NA)			0.12 (NA to NA)			0.04 (NA to NA)		
Residual.sd__Observation	2.7 (NA to NA)			0.00 (NA to NA)			0.21 (NA to NA)			0.24 (NA to NA)			0.04 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	7														
	APexc COV			APexc			MLexc COV			MLexc			Step Dur		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	18 (16 to 21)	<0.001	<0.001	0.08 (0.08 to 0.09)	<0.001	<0.001	9.8 (7.8 to 12)	<0.001	<0.001	0.13 (0.12 to 0.14)	<0.001	<0.001	1.5 (1.5 to 1.6)	<0.001	<0.001
speed_cond_num	-3.7 (-7.0 to -0.47)	0.025	0.033	-0.04 (-0.05 to -0.04)	<0.001	<0.001	5.9 (3.4 to 8.3)	<0.001	<0.001	-0.08 (-0.09 to -0.07)	<0.001	<0.001	-1.0 (-1.1 to -0.93)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		0.12	0.12		0.010	0.010		<0.001	<0.001
H1000's	—			—			—			—			—		
H2000's	4.9 (0.53 to 9.2)			-0.01 (-0.02 to 0.00)			-2.1 (-5.4 to 1.2)			0.02 (0.01 to 0.04)			-0.31 (-0.41 to -0.21)		
H3000's	9.1 (5.2 to 13)			-0.03 (-0.03 to -0.02)			1.4 (-1.5 to 4.3)			0.00 (-0.02 to 0.01)			-0.51 (-0.60 to -0.42)		
speed_cond_num * group_char		0.85	0.85		<0.001	<0.001		0.016	0.021		0.001	0.002		<0.001	<0.001
speed_cond_num * H2000's	1.1 (-4.2 to 6.4)			0.01 (0.00 to 0.02)			4.8 (0.80 to 8.9)			-0.03 (-0.05 to -0.01)			0.30 (0.16 to 0.43)		
speed_cond_num * H3000's	-0.44 (-5.1 to 4.2)			0.02 (0.01 to 0.03)			-0.95 (-4.5 to 2.6)			0.00 (-0.02 to 0.01)			0.48 (0.36 to 0.60)		
subj_char.sd__(Intercept)	3.7 (NA to NA)			0.01 (NA to NA)			2.7 (NA to NA)			0.02 (NA to NA)			0.06 (NA to NA)		
Residual.sd__Observation	4.6 (NA to NA)			0.01 (NA to NA)			3.5 (NA to NA)			0.01 (NA to NA)			0.12 (NA to NA)		

Cluster:	7														
	UDexc COV			UDexc			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	22 (20 to 24)	<0.001	<0.001	0.01 (0.00 to 0.01)	<0.001	<0.001	2.3 (2.2 to 2.4)	<0.001	<0.001	3.1 (3.0 to 3.2)	<0.001	<0.001	0.00 (-0.02 to 0.03)	0.73	0.81
speed_cond_num	-16 (-17 to -14)	<0.001	<0.001	0.03 (0.02 to 0.03)	<0.001	<0.001	-1.7 (-1.8 to -1.5)	<0.001	<0.001	-2.0 (-2.2 to -1.9)	<0.001	<0.001	0.37 (0.34 to 0.39)	<0.001	<0.001
group_char		0.36	0.36		0.96	0.96		<0.001	<0.001		<0.001	<0.001		0.71	0.81
H1000's	—			—			—			—			—		
H2000's	1.8 (-0.75 to 4.4)			0.00 (0.00 to 0.00)			-0.49 (-0.66 to -0.32)			-0.62 (-0.82 to -0.42)			0.01 (-0.03 to 0.05)		
H3000's	0.27 (-2.0 to 2.5)			0.00 (0.00 to 0.00)			-0.78 (-0.93 to -0.63)			-1.0 (-1.2 to -0.84)			0.01 (-0.02 to 0.05)		
speed_cond_num * group_char		0.040	0.054		0.85	0.96		<0.001	<0.001		<0.001	<0.001		0.81	0.81
speed_cond_num * H2000's	-1.7 (-4.7 to 1.4)			0.00 (0.00 to 0.00)			0.49 (0.25 to 0.73)			0.59 (0.32 to 0.87)			0.01 (-0.03 to 0.05)		
speed_cond_num * H3000's	2.3 (-0.45 to 5.0)			0.00 (0.00 to 0.00)			0.77 (0.56 to 0.99)			0.97 (0.72 to 1.2)			0.00 (-0.03 to 0.04)		
subj_char.sd__(Intercept)	2.3 (NA to NA)			0.00 (NA to NA)			0.07 (NA to NA)			0.12 (NA to NA)			0.04 (NA to NA)		
Residual.sd__Observation	2.7 (NA to NA)			0.00 (NA to NA)			0.21 (NA to NA)			0.24 (NA to NA)			0.03 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	8														
	APexc COV			APexc			MLexc COV			MLexc			Step Dur		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	18 (15 to 21)	<0.001	<0.001	0.08 (0.07 to 0.09)	<0.001	<0.001	11 (8.4 to 13)	<0.001	<0.001	0.13 (0.11 to 0.14)	<0.001	<0.001	1.6 (1.5 to 1.6)	<0.001	<0.001
speed_cond_num	-3.4 (-6.8 to 0.13)	0.059	0.061	-0.04 (-0.05 to -0.03)	<0.001	<0.001	6.4 (3.5 to 9.2)	<0.001	<0.001	-0.08 (-0.09 to -0.06)	<0.001	<0.001	-1.0 (-1.1 to -0.95)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		0.003	0.003		<0.001	<0.001
H1000's	—			—			—			—			—		
H2000's	5.0 (1.0 to 9.0)			-0.03 (-0.03 to -0.02)			-3.8 (-6.9 to -0.72)			0.03 (0.01 to 0.05)			-0.43 (-0.53 to -0.33)		
H3000's	13 (9.3 to 18)			-0.02 (-0.03 to -0.01)			2.6 (-0.60 to 5.8)			0.01 (0.00 to 0.03)			-0.61 (-0.72 to -0.51)		
speed_cond_num * group_char		0.061	0.061		<0.001	<0.001		<0.001	<0.001		0.003	0.003		<0.001	<0.001
speed_cond_num * H2000's	0.99 (-4.0 to 6.0)			0.02 (0.01 to 0.03)			5.0 (0.96 to 9.1)			-0.03 (-0.05 to -0.01)			0.43 (0.30 to 0.57)		
speed_cond_num * H3000's	-4.9 (-10 to 0.23)			0.02 (0.01 to 0.03)			-3.3 (-7.5 to 0.86)			-0.01 (-0.03 to 0.01)			0.60 (0.46 to 0.74)		
subj_char.sd__(Intercept)	3.3 (NA to NA)			0.01 (NA to NA)			2.1 (NA to NA)			0.02 (NA to NA)			0.06 (NA to NA)		
Residual.sd__Observation	4.3 (NA to NA)			0.01 (NA to NA)			3.5 (NA to NA)			0.01 (NA to NA)			0.12 (NA to NA)		

Cluster:	8														
	UDexc COV			UDexc			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	22 (21 to 24)	<0.001	<0.001	0.01 (0.00 to 0.01)	<0.001	<0.001	2.3 (2.2 to 2.5)	<0.001	<0.001	3.1 (3.0 to 3.3)	<0.001	<0.001	0.01 (-0.02 to 0.03)	0.70	0.70
speed_cond_num	-16 (-17 to -14)	<0.001	<0.001	0.03 (0.02 to 0.03)	<0.001	<0.001	-1.7 (-1.9 to -1.6)	<0.001	<0.001	-2.1 (-2.3 to -1.9)	<0.001	<0.001	0.37 (0.34 to 0.39)	<0.001	<0.001
group_char		0.18	0.24		0.035	0.035		<0.001	<0.001		<0.001	<0.001		0.039	0.059
H1000's	—			—			—			—			—		
H2000's	2.0 (-0.18 to 4.1)			0.00 (-0.01 to 0.00)			-0.67 (-0.84 to -0.50)			-0.86 (-1.1 to -0.65)			-0.01 (-0.05 to 0.03)		
H3000's	1.4 (-0.76 to 3.7)			0.00 (0.00 to 0.01)			-0.92 (-1.1 to -0.74)			-1.2 (-1.4 to -1.0)			0.04 (0.00 to 0.07)		
speed_cond_num * group_char		0.27	0.27		0.020	0.027		<0.001	<0.001		<0.001	<0.001		0.044	0.059
speed_cond_num * H2000's	-1.5 (-4.2 to 1.2)			0.01 (0.00 to 0.01)			0.70 (0.46 to 0.94)			0.87 (0.59 to 1.1)			0.05 (0.01 to 0.08)		
speed_cond_num * H3000's	0.80 (-2.0 to 3.6)			0.00 (0.00 to 0.01)			0.96 (0.71 to 1.2)			1.2 (0.93 to 1.5)			0.02 (-0.02 to 0.06)		
subj_char.sd__(Intercept)	1.6 (NA to NA)			0.00 (NA to NA)			0.07 (NA to NA)			0.12 (NA to NA)			0.04 (NA to NA)		
Residual.sd__Observation	2.4 (NA to NA)			0.00 (NA to NA)			0.21 (NA to NA)			0.24 (NA to NA)			0.03 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	9														
	APexc COV			APexc			MLexc COV			MLexc			Step Dur		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	18 (15 to 20)	<0.001	<0.001	0.08 (0.08 to 0.09)	<0.001	<0.001	11 (8.4 to 13)	<0.001	<0.001	0.13 (0.12 to 0.14)	<0.001	<0.001	1.6 (1.5 to 1.6)	<0.001	<0.001
speed_cond_num	-2.7 (-5.5 to 0.04)	0.053	0.071	-0.05 (-0.05 to -0.04)	<0.001	<0.001	7.0 (4.4 to 9.6)	<0.001	<0.001	-0.07 (-0.08 to -0.06)	<0.001	<0.001	-1.1 (-1.1 to -0.96)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		0.21	0.21		0.018	0.018		<0.001	<0.001
H1000's	—			—			—			—			—		
H2000's	7.4 (4.1 to 11)			-0.02 (-0.03 to -0.01)			-2.4 (-5.5 to 0.81)			0.02 (0.01 to 0.04)			-0.44 (-0.54 to -0.34)		
H3000's	11 (7.5 to 14)			-0.03 (-0.04 to -0.02)			0.44 (-2.8 to 3.7)			0.00 (-0.01 to 0.02)			-0.59 (-0.69 to -0.49)		
speed_cond_num * group_char		0.19	0.19		<0.001	<0.001		0.15	0.20		0.004	0.006		<0.001	<0.001
speed_cond_num * H2000's	-1.4 (-5.5 to 2.8)			0.02 (0.01 to 0.03)			2.2 (-1.7 to 6.1)			-0.02 (-0.04 to -0.01)			0.44 (0.31 to 0.58)		
speed_cond_num * H3000's	-4.0 (-8.3 to 0.33)			0.03 (0.02 to 0.04)			-2.0 (-6.0 to 2.0)			0.00 (-0.02 to 0.01)			0.58 (0.44 to 0.72)		
subj_char.sd__(Intercept)	2.8 (NA to NA)			0.01 (NA to NA)			2.8 (NA to NA)			0.02 (NA to NA)			0.05 (NA to NA)		
Residual.sd__Observation	3.8 (NA to NA)			0.01 (NA to NA)			3.5 (NA to NA)			0.01 (NA to NA)			0.12 (NA to NA)		

Cluster:	9														
	UDexc COV			UDexc			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	22 (21 to 24)	<0.001	<0.001	0.01 (0.00 to 0.01)	<0.001	<0.001	2.4 (2.2 to 2.5)	<0.001	<0.001	3.2 (3.0 to 3.3)	<0.001	<0.001	0.01 (-0.02 to 0.03)	0.64	0.64
speed_cond_num	-16 (-18 to -14)	<0.001	<0.001	0.03 (0.02 to 0.03)	<0.001	<0.001	-1.8 (-1.9 to -1.6)	<0.001	<0.001	-2.1 (-2.3 to -1.9)	<0.001	<0.001	0.36 (0.34 to 0.39)	<0.001	<0.001
group_char		0.18	0.24		0.19	0.19		<0.001	<0.001		<0.001	<0.001		0.062	0.082
H1000's	—			—			—			—			—		
H2000's	2.0 (-0.15 to 4.2)			0.00 (-0.01 to 0.00)			-0.67 (-0.84 to -0.51)			-0.89 (-1.1 to -0.69)			-0.01 (-0.04 to 0.03)		
H3000's	1.2 (-1.1 to 3.5)			0.00 (0.00 to 0.00)			-0.89 (-1.1 to -0.72)			-1.2 (-1.4 to -0.98)			0.03 (0.00 to 0.07)		
speed_cond_num * group_char		0.26	0.26		0.024	0.032		<0.001	<0.001		<0.001	<0.001		0.010	0.020
speed_cond_num * H2000's	-1.7 (-4.6 to 1.1)			0.00 (0.00 to 0.01)			0.70 (0.46 to 0.94)			0.89 (0.61 to 1.2)			0.05 (0.02 to 0.08)		
speed_cond_num * H3000's	0.78 (-2.2 to 3.7)			0.00 (0.00 to 0.00)			0.92 (0.67 to 1.2)			1.2 (0.88 to 1.4)			0.01 (-0.02 to 0.05)		
subj_char.sd__(Intercept)	1.6 (NA to NA)			0.00 (NA to NA)			0.06 (NA to NA)			0.10 (NA to NA)			0.04 (NA to NA)		
Residual.sd__Observation	2.6 (NA to NA)			0.00 (NA to NA)			0.22 (NA to NA)			0.25 (NA to NA)			0.03 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	10														
	APexc COV			APexc			MLexc COV			MLexc			Step Dur		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	18 (15 to 20)	<0.001	<0.001	0.08 (0.07 to 0.09)	<0.001	<0.001	10 (8.1 to 12)	<0.001	<0.001	0.13 (0.12 to 0.14)	<0.001	<0.001	1.6 (1.5 to 1.6)	<0.001	<0.001
speed_cond_num	-3.0 (-6.1 to 0.09)	0.057	0.076	-0.04 (-0.05 to -0.03)	<0.001	<0.001	6.7 (4.2 to 9.1)	<0.001	<0.001	-0.07 (-0.09 to -0.06)	<0.001	<0.001	-1.0 (-1.1 to -0.94)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		0.39	0.39		<0.001	<0.001		<0.001	<0.001
H1000's	—			—			—			—			—		
H2000's	7.2 (3.4 to 11)			-0.02 (-0.03 to -0.01)			-2.1 (-5.2 to 1.0)			0.03 (0.01 to 0.05)			-0.40 (-0.50 to -0.30)		
H3000's	11 (7.5 to 15)			-0.03 (-0.04 to -0.02)			-0.38 (-3.7 to 2.9)			0.01 (-0.01 to 0.02)			-0.60 (-0.70 to -0.50)		
speed_cond_num * group_char		0.43	0.43		<0.001	<0.001		0.26	0.35		<0.001	<0.001		<0.001	<0.001
speed_cond_num * H2000's	-0.88 (-5.6 to 3.8)			0.01 (0.00 to 0.02)			2.7 (-0.97 to 6.4)			-0.03 (-0.05 to -0.02)			0.39 (0.26 to 0.52)		
speed_cond_num * H3000's	-3.3 (-8.3 to 1.7)			0.03 (0.01 to 0.04)			-0.20 (-4.1 to 3.7)			-0.01 (-0.03 to 0.01)			0.56 (0.42 to 0.70)		
subj_char.sd__(Intercept)	3.2 (NA to NA)			0.01 (NA to NA)			3.0 (NA to NA)			0.02 (NA to NA)			0.07 (NA to NA)		
Residual.sd__Observation	4.4 (NA to NA)			0.01 (NA to NA)			3.5 (NA to NA)			0.02 (NA to NA)			0.12 (NA to NA)		

Cluster:	10														
	UDexc COV			UDexc			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	22 (20 to 23)	<0.001	<0.001	0.01 (0.00 to 0.01)	<0.001	<0.001	2.3 (2.2 to 2.4)	<0.001	<0.001	3.1 (3.0 to 3.2)	<0.001	<0.001	0.01 (-0.01 to 0.03)	0.50	0.67
speed_cond_num	-15 (-17 to -13)	<0.001	<0.001	0.03 (0.02 to 0.03)	<0.001	<0.001	-1.7 (-1.9 to -1.6)	<0.001	<0.001	-2.0 (-2.2 to -1.9)	<0.001	<0.001	0.36 (0.34 to 0.38)	<0.001	<0.001
group_char		0.027	0.027		0.70	0.70		<0.001	<0.001		<0.001	<0.001		0.79	0.79
H1000's	—			—			—			—			—		
H2000's	2.3 (0.12 to 4.5)			0.00 (0.00 to 0.00)			-0.60 (-0.77 to -0.44)			-0.79 (-0.99 to -0.60)			0.00 (-0.03 to 0.03)		
H3000's	-0.84 (-3.2 to 1.5)			0.00 (0.00 to 0.00)			-0.91 (-1.1 to -0.73)			-1.2 (-1.4 to -0.99)			0.01 (-0.02 to 0.04)		
speed_cond_num * group_char		0.008	0.011		0.11	0.14		<0.001	<0.001		<0.001	<0.001		0.016	0.032
speed_cond_num * H2000's	-1.8 (-4.4 to 0.81)			0.00 (0.00 to 0.01)			0.62 (0.39 to 0.85)			0.78 (0.52 to 1.0)			0.05 (0.02 to 0.09)		
speed_cond_num * H3000's	2.8 (0.03 to 5.6)			0.00 (0.00 to 0.01)			0.90 (0.65 to 1.1)			1.1 (0.84 to 1.4)			0.03 (0.00 to 0.07)		
subj_char.sd__(Intercept)	2.2 (NA to NA)			0.00 (NA to NA)			0.08 (NA to NA)			0.13 (NA to NA)			0.03 (NA to NA)		
Residual.sd__Observation	2.5 (NA to NA)			0.00 (NA to NA)			0.22 (NA to NA)			0.25 (NA to NA)			0.03 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	11														
	APexc COV			APexc			MLexc COV			MLexc			Step Dur		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	17 (14 to 20)	<0.001	<0.001	0.08 (0.07 to 0.09)	<0.001	<0.001	11 (8.7 to 14)	<0.001	<0.001	0.12 (0.10 to 0.13)	<0.001	<0.001	1.6 (1.5 to 1.7)	<0.001	<0.001
speed_cond_num	-2.7 (-6.5 to 1.1)	0.16	0.22	-0.04 (-0.05 to -0.03)	<0.001	<0.001	5.8 (2.7 to 9.0)	<0.001	<0.001	-0.07 (-0.08 to -0.06)	<0.001	<0.001	-1.1 (-1.2 to -0.95)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		0.36	0.48		<0.001	<0.001		<0.001	<0.001
H1000's	—			—			—			—			—		
H2000's	7.5 (2.8 to 12)			-0.02 (-0.03 to -0.01)			-2.6 (-6.6 to 1.3)			0.04 (0.02 to 0.06)			-0.45 (-0.57 to -0.34)		
H3000's	12 (7.3 to 16)			-0.02 (-0.03 to -0.01)			-0.11 (-3.9 to 3.7)			0.04 (0.02 to 0.05)			-0.54 (-0.66 to -0.43)		
speed_cond_num * group_char		0.74	0.74		0.026	0.026		0.64	0.64		0.001	0.001		<0.001	<0.001
speed_cond_num * H2000's	-2.3 (-8.1 to 3.5)			0.02 (0.00 to 0.03)			1.9 (-2.9 to 6.7)			-0.03 (-0.05 to -0.01)			0.47 (0.31 to 0.63)		
speed_cond_num * H3000's	-1.2 (-6.8 to 4.3)			0.02 (0.00 to 0.03)			-0.35 (-5.0 to 4.3)			-0.03 (-0.05 to -0.01)			0.52 (0.36 to 0.67)		
subj_char.sd__(Intercept)	3.4 (NA to NA)			0.01 (NA to NA)			3.1 (NA to NA)			0.02 (NA to NA)			0.06 (NA to NA)		
Residual.sd__Observation	4.5 (NA to NA)			0.01 (NA to NA)			3.7 (NA to NA)			0.01 (NA to NA)			0.12 (NA to NA)		

Cluster:	11														
	UDexc COV			UDexc			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	21 (20 to 23)	<0.001	<0.001	0.01 (0.00 to 0.01)	<0.001	<0.001	2.3 (2.2 to 2.5)	<0.001	<0.001	3.2 (3.0 to 3.3)	<0.001	<0.001	0.00 (-0.02 to 0.03)	0.86	0.87
speed_cond_num	-15 (-17 to -13)	<0.001	<0.001	0.03 (0.02 to 0.03)	<0.001	<0.001	-1.7 (-1.9 to -1.5)	<0.001	<0.001	-2.1 (-2.3 to -1.9)	<0.001	<0.001	0.38 (0.35 to 0.41)	<0.001	<0.001
group_char		0.34	0.34		0.28	0.28		<0.001	<0.001		<0.001	<0.001		0.43	0.85
H1000's	—			—			—			—			—		
H2000's	2.1 (-0.70 to 4.8)			0.00 (-0.01 to 0.00)			-0.67 (-0.86 to -0.48)			-0.90 (-1.1 to -0.67)			0.01 (-0.03 to 0.05)		
H3000's	1.0 (-1.6 to 3.7)			0.00 (0.00 to 0.01)			-0.81 (-0.99 to -0.62)			-1.1 (-1.3 to -0.87)			0.03 (-0.01 to 0.07)		
speed_cond_num * group_char		0.24	0.32		0.082	0.11		<0.001	<0.001		<0.001	<0.001		0.87	0.87
speed_cond_num * H2000's	-1.5 (-4.9 to 2.0)			0.00 (0.00 to 0.01)			0.71 (0.44 to 0.98)			0.94 (0.62 to 1.3)			0.01 (-0.04 to 0.05)		
speed_cond_num * H3000's	1.6 (-1.7 to 4.8)			0.00 (-0.01 to 0.00)			0.80 (0.54 to 1.1)			1.0 (0.73 to 1.3)			0.00 (-0.05 to 0.04)		
subj_char.sd__(Intercept)	2.0 (NA to NA)			0.00 (NA to NA)			0.06 (NA to NA)			0.11 (NA to NA)			0.04 (NA to NA)		
Residual.sd__Observation	2.7 (NA to NA)			0.00 (NA to NA)			0.21 (NA to NA)			0.25 (NA to NA)			0.03 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	12														
	APexc COV			APexc			MLexc COV			MLexc			Step Dur		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	20 (17 to 23)	<0.001	<0.001	0.08 (0.08 to 0.09)	<0.001	<0.001	12 (9.4 to 14)	<0.001	<0.001	0.13 (0.12 to 0.14)	<0.001	<0.001	1.5 (1.5 to 1.6)	<0.001	<0.001
speed_cond_num	-5.2 (-9.2 to -1.2)	0.010	0.014	-0.05 (-0.05 to -0.04)	<0.001	<0.001	4.2 (1.1 to 7.3)	0.008	0.017	-0.08 (-0.09 to -0.06)	<0.001	<0.001	-1.0 (-1.1 to -0.91)	<0.001	<0.001
group_char		<0.001	0.002		<0.001	<0.001		0.19	0.25		0.10	0.10		<0.001	<0.001
H1000's	—			—			—			—			—		
H2000's	4.8 (-0.28 to 9.8)			-0.02 (-0.03 to -0.01)			-3.5 (-7.4 to 0.38)			0.02 (0.00 to 0.04)			-0.41 (-0.53 to -0.30)		
H3000's	8.6 (4.1 to 13)			-0.03 (-0.04 to -0.02)			-2.1 (-5.6 to 1.4)			0.01 (-0.01 to 0.03)			-0.54 (-0.64 to -0.44)		
speed_cond_num * group_char		0.99	0.99		<0.001	<0.001		0.36	0.36		0.059	0.079		<0.001	<0.001
speed_cond_num * H2000's	0.52 (-5.9 to 6.9)			0.02 (0.00 to 0.03)			3.0 (-2.0 to 7.9)			-0.03 (-0.05 to 0.00)			0.40 (0.24 to 0.56)		
speed_cond_num * H3000's	0.18 (-5.6 to 5.9)			0.03 (0.01 to 0.04)			2.8 (-1.6 to 7.3)			-0.01 (-0.03 to 0.01)			0.52 (0.38 to 0.67)		
subj_char.sd__(Intercept)	3.3 (NA to NA)			0.01 (NA to NA)			2.5 (NA to NA)			0.02 (NA to NA)			0.05 (NA to NA)		
Residual.sd__Observation	4.7 (NA to NA)			0.01 (NA to NA)			3.7 (NA to NA)			0.02 (NA to NA)			0.12 (NA to NA)		

Cluster:	12														
	UDexc COV			UDexc			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	23 (21 to 25)	<0.001	<0.001	0.01 (0.00 to 0.01)	<0.001	<0.001	2.3 (2.2 to 2.4)	<0.001	<0.001	3.1 (2.9 to 3.2)	<0.001	<0.001	0.00 (-0.03 to 0.03)	0.84	0.84
speed_cond_num	-17 (-19 to -14)	<0.001	<0.001	0.02 (0.02 to 0.03)	<0.001	<0.001	-1.7 (-1.8 to -1.5)	<0.001	<0.001	-2.0 (-2.2 to -1.8)	<0.001	<0.001	0.36 (0.33 to 0.39)	<0.001	<0.001
group_char		0.20	0.20		0.39	0.39		<0.001	<0.001		<0.001	<0.001		0.63	0.84
H1000's	—			—			—			—			—		
H2000's	0.77 (-2.1 to 3.7)			0.00 (-0.01 to 0.00)			-0.63 (-0.82 to -0.44)			-0.83 (-1.1 to -0.60)			-0.01 (-0.05 to 0.04)		
H3000's	-1.8 (-4.4 to 0.84)			0.00 (0.00 to 0.00)			-0.82 (-0.99 to -0.65)			-1.1 (-1.3 to -0.87)			0.01 (-0.03 to 0.06)		
speed_cond_num * group_char		0.039	0.052		0.002	0.003		<0.001	<0.001		<0.001	<0.001		0.010	0.020
speed_cond_num * H2000's	-0.31 (-4.1 to 3.4)			0.01 (0.00 to 0.01)			0.63 (0.36 to 0.90)			0.80 (0.49 to 1.1)			0.07 (0.02 to 0.11)		
speed_cond_num * H3000's	3.8 (0.44 to 7.2)			0.01 (0.00 to 0.01)			0.84 (0.59 to 1.1)			1.0 (0.77 to 1.3)			0.05 (0.01 to 0.10)		
subj_char.sd__(Intercept)	1.9 (NA to NA)			0.00 (NA to NA)			0.05 (NA to NA)			0.10 (NA to NA)			0.04 (NA to NA)		
Residual.sd__Observation	2.8 (NA to NA)			0.00 (NA to NA)			0.20 (NA to NA)			0.23 (NA to NA)			0.03 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	13																													
	APeak COV			APeak			MLeng COV			MLeng			Step Dur			UDwar COV			UDwar			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	18 (16 to 21)	<0.001	<0.001	0.08 (0.07 to 0.09)	<0.001	<0.001	11 (9.1 to 13)	<0.001	<0.001	0.12 (0.11 to 0.14)	<0.001	<0.001	1.5 (1.4 to 1.6)	<0.001	<0.001	24 (22 to 25)	<0.001	<0.001	0.01 (0.01 to 0.01)	<0.001	<0.001	2.3 (2.1 to 2.4)	<0.001	<0.001	3.0 (2.9 to 3.2)	<0.001	<0.001	0.01 (-0.01 to 0.01)	0.27	0.38
speed_cond__sum	-3.3 (-6.4 to -0.17)	0.038	0.051	-0.04 (-0.05 to -0.03)	<0.001	<0.001	6.2 (3.7 to 8.6)	<0.001	<0.001	-0.07 (-0.08 to -0.06)	<0.001	<0.001	-0.98 (-1.1 to -0.89)	<0.001	<0.001	-17 (-19 to -15)	<0.001	<0.001	0.03 (0.02 to 0.03)	<0.001	<0.001	-1.6 (-1.8 to -1.5)	<0.001	<0.001	-2.0 (-2.1 to -1.8)	<0.001	<0.001	0.35 (0.33 to 0.38)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		0.27	0.39		0.022	0.027		<0.001	<0.001		0.26	0.52		0.78	0.78		<0.001	<0.001		<0.001	<0.001		0.77	0.77
H1000's																														
H2000's	5.2 (-0.06 to 11)			-0.01 (-0.02 to 0.00)			-1.1 (-5.6 to 3.4)			0.03 (0.01 to 0.05)			-0.31 (-0.45 to -0.17)			2.3 (-0.93 to 5.5)			0.00 (0.00 to 0.01)			-0.42 (-0.65 to -0.18)			-0.63 (-0.98 to -0.35)			0.09 (-0.05 to 0.05)		
H3000's	11 (7.9 to 15)			-0.03 (-0.04 to -0.02)			-1.6 (-5.1 to 2.0)			0.02 (0.00 to 0.04)			-0.57 (-0.68 to -0.46)			0.61 (-1.9 to 3.2)			0.00 (-0.01 to 0.00)			-0.82 (-1.0 to -0.64)			-1.1 (-1.4 to -0.92)			0.01 (-0.02 to 0.05)		
speed_cond__sum * group_char		0.66	0.66		<0.001	<0.001		0.99	0.99		0.083	0.084		<0.001	<0.001		0.57	0.57		0.19	0.25		<0.001	<0.001		<0.001	<0.001		0.053	0.10
speed_cond__sum * H2000's	0.79 (-5.5 to 7.1)			0.01 (-0.01 to 0.02)			0.71 (-4.3 to 5.7)			-0.03 (-0.05 to -0.01)			0.29 (0.10 to 0.47)			-1.4 (-5.5 to 2.8)			0.00 (0.00 to 0.00)			0.40 (0.06 to 0.73)			0.57 (0.26 to 0.95)			0.03 (-0.02 to 0.08)		
speed_cond__sum * H3000's	-1.9 (-8.8 to 2.9)			0.03 (0.01 to 0.04)			0.35 (-3.0 to 4.0)			-0.02 (-0.04 to 0.00)			0.53 (0.38 to 0.69)			1.0 (-2.2 to 4.3)			0.00 (0.00 to 0.01)			0.81 (0.55 to 1.1)			1.0 (0.57 to 1.4)			0.05 (0.01 to 0.09)		
subj_char.sd__(Intercept)	3.6 (NA to NA)			0.01 (NA to NA)			3.4 (NA to NA)			0.02 (NA to NA)			0.06 (NA to NA)			1.7 (NA to NA)			0.00 (NA to NA)			0.08 (NA to NA)			0.13 (NA to NA)			0.04 (NA to NA)		
Residual.sd__Observation	4.1 (NA to NA)			0.01 (NA to NA)			3.3 (NA to NA)			0.01 (NA to NA)			0.12 (NA to NA)			2.8 (NA to NA)			0.00 (NA to NA)			0.22 (NA to NA)			0.25 (NA to NA)			0.03 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing

Cluster:	14																													
	APeak COV			APeak			MLeng COV			MLeng			Step Dur			UDwar COV			UDwar			Stance Dur			GaitCycle Dur			Peak UpDown Vel		
Characteristic	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**	**Beta (95% CI)**	**p-value**	**q-value**
(Intercept)	19 (16 to 21)	<0.001	<0.001	0.08 (0.08 to 0.09)	<0.001	<0.001	11 (9.0 to 13)	<0.001	<0.001	0.13 (0.12 to 0.14)	<0.001	<0.001	1.5 (1.5 to 1.6)	<0.001	<0.001	23 (21 to 24)	<0.001	<0.001	0.01 (0.01 to 0.01)	<0.001	<0.001	2.3 (2.2 to 2.4)	<0.001	<0.001	3.1 (3.0 to 3.2)	<0.001	<0.001	0.01 (-0.01 to 0.01)	0.50	0.50
speed_cond__sum	-3.0 (-5.1 to -0.76)	0.015	0.019	-0.04 (-0.05 to -0.04)	<0.001	<0.001	5.9 (3.1 to 8.5)	<0.001	<0.001	-0.08 (-0.09 to -0.07)	<0.001	<0.001	-1.0 (-1.1 to -0.93)	<0.001	<0.001	-16 (-18 to -14)	<0.001	<0.001	0.03 (0.02 to 0.03)	<0.001	<0.001	-1.7 (-1.9 to -1.5)	<0.001	<0.001	-2.0 (-2.2 to -1.9)	<0.001	<0.001	0.37 (0.35 to 0.39)	<0.001	<0.001
group_char		<0.001	<0.001		<0.001	<0.001		0.13	0.16		0.004	0.004		<0.001	<0.001		0.26	0.26		0.40	0.40		<0.001	<0.001		<0.001	<0.001		0.39	0.50
H1000's																														
H2000's	5.7 (1.8 to 9.6)			-0.02 (-0.03 to -0.01)			-3.0 (-6.4 to 0.42)			0.03 (0.01 to 0.04)			-0.37 (-0.47 to -0.26)			1.9 (-0.50 to 4.2)			0.00 (-0.01 to 0.00)			-0.58 (-0.74 to -0.41)			-0.75 (-0.95 to -0.55)			-0.01 (-0.04 to 0.02)		
H3000's	11 (6.0 to 15)			-0.03 (-0.04 to -0.02)			0.34 (-3.0 to 3.8)			0.00 (-0.01 to 0.02)			-0.56 (-0.66 to -0.46)			0.19 (-2.1 to 2.5)			0.00 (0.00 to 0.00)			-0.85 (-1.0 to -0.68)			-1.1 (-1.3 to -0.92)			0.01 (-0.02 to 0.04)		
speed_cond__sum * group_char		0.41	0.41		<0.001	<0.001		0.16	0.16		0.032	0.032		<0.001	<0.001		0.18	0.24		0.23	0.31		<0.001	<0.001		<0.001	<0.001		0.042	0.084
speed_cond__sum * H2000's	0.12 (-4.8 to 5.1)			0.01 (0.00 to 0.02)			3.1 (-1.1 to 7.3)			-0.03 (-0.05 to -0.01)			0.36 (0.23 to 0.50)			-1.1 (-4.1 to 1.8)			0.00 (0.00 to 0.01)			0.58 (0.34 to 0.81)			0.72 (0.45 to 0.99)			0.05 (0.01 to 0.08)		
speed_cond__sum * H3000's	-2.3 (-7.7 to 1.9)			0.02 (0.01 to 0.03)			-1.1 (-5.2 to 3.0)			0.00 (-0.02 to 0.02)			0.54 (0.40 to 0.67)			1.8 (-1.1 to 4.6)			0.00 (0.00 to 0.01)			0.85 (0.62 to 1.1)			1.1 (0.81 to 1.3)			0.02 (-0.02 to 0.05)		
subj_char.sd__(Intercept)	3.2 (NA to NA)			0.01 (NA to NA)			3.9 (NA to NA)			0.02 (NA to NA)			0.06 (NA to NA)			2.1 (NA to NA)			0.00 (NA to NA)			0.07 (NA to NA)			0.12 (NA to NA)			0.03 (NA to NA)		
Residual.sd__Observation	4.6 (NA to NA)			0.01 (NA to NA)			3.9 (NA to NA)			0.02 (NA to NA)			0.13 (NA to NA)			2.7 (NA to NA)			0.00 (NA to NA)			0.22 (NA to NA)			0.25 (NA to NA)			0.03 (NA to NA)		

[1] CI = Confidence Interval

[2] False discovery rate correction for multiple testing