```
%% PREDICTORS: SPEED CONDITION, GROUP, & INTERACTION; RESPONSE: KINEMATICS, STATS
TEST
STATS_OUT = [];
im_resize= 1.2;
VIOLIN_BOTTOM = 0.7;
AX_H  = 0.2;
AX_W = 0.25;
DO_PLOT_GROUPS = true;
tmp_savedir = [save_dir filesep 'Pspeed-Pgroup-Pinter-Rkin'];
mkdir(tmp_savedir);
```

```
Warning: Directory already exists.
```

```
for var_i = 1:length(varnames)
    vert_shift = 0;
    for des_i = 2 %## JUST SPEED
        %##
        horiz_shift = 0;
        switch des_i
            case 1
                color_dark = COLORS_MAPS_TERRAIN;
                color_light = COLORS_MAPS_TERRAIN;
                GROUP_CMAP_OFFSET = [0,0.1,0.1];
                xtick_label_g = {'flat','low','med','high'};
            case 2
                color_dark = COLOR_MAPS_SPEED;
                color_light = COLOR_MAPS_SPEED+0.15;
                GROUP_CMAP_OFFSET = [0.15,0,0];
                xtick_label_g = {'0.25','0.50','0.75','1.0'};
        end
        inds = TMP_FOOOF_T.design_id == designs(des_i);
        T_vals_plot = TMP_FOOOF_T(inds,:);
        subjects = unique(T_vals_plot.subj_char);
        conds = unique(T_vals_plot.cond_char);
        % groups = unique(T_vals_plot.group_id);
        t_tmp = [];
        for i = 1:length(subjects)
            ii = find(T_vals_plot.subj_char == subjects(i));
            tt = T_vals_plot(ii,:);
            for j = 1:length(conds)
                jj = find(tt.cond_char == conds(j));
                t_tmp = [t_tmp; tt(jj(1),:)];
            end
        end
        T_vals_plot = table(categorical(string(t_tmp.cond_char)),t_tmp.
(varnames{var_i}),categorical(string(t_tmp.group_char)),...
           'VariableNames',{'cond_char',varnames{var_i},'group_char'});
        % T_vals_plot.cond_char = double(string(T_vals_plot.cond_char));
        try
```

```
            mod = sprintf('%s ~ 1 + cond_char + group_char +
cond_char*group_char',varnames{var_i});
            % stats_out = fitlme(T_vals_plot,mod);
            stats_out = fitlm(T_vals_plot,mod);
            anova_out
= anova(T_vals_plot,mod,'SumOfSquaresType',"three",'CategoricalFactors',
{'group_char','cond_char'},...
                'ModelSpecification','interactions');
            anova_out = anova_out.stats();
            % anova_out = anovan(double(T_vals_plot.(varnames{var_i})),
{T_vals_plot.group_char,T_vals_plot.cond_char},...
            %             'model','interaction',...
            %             'model',2,...
            %             'sstype',3,...
            %             'varnames',strvcat('group','speed'));
            R2 = stats_out.Rsquared.Adjusted;
            %## PRINT TABLES
            disp(anova_out);
            disp(stats_out);
            % t = sprintf_table(anova_out);
            % t.Print
            % t.display
            % t.saveToFile([tmp_savedir filesep
sprintf('%s_ANOVA.txt',varnames{var_i})]);
            % t = sprintf_table(stats_out.Coefficients);
            % t.Print
            % t.display
            % t.saveToFile([tmp_savedir filesep
sprintf('%s_LM.txt',varnames{var_i})]);
            %-
            anova_p_var =
anova_out.pValue(strcmp(anova_out.Properties.RowNames,'cond_char'));
            anova_p_group =
anova_out.pValue(strcmp(anova_out.Properties.RowNames,'group_char'));
            anova_p_inter =
anova_out.pValue(strcmp(anova_out.Properties.RowNames,'cond_char:group_char'));
            %-
            pval_inter =
double(stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNam
es,'(Intercept)')));
            pval_grp2  =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'gro
up_char_H2000''s'));
            pval_grp3  =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'gro
up_char_H3000''s'));
            pval_var_0p5 =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'con
d_char_0.5'));
```

```
            pval_var_0p75 =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'con
d_char_0.75'));
            pval_var_1p0 =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'con
d_char_1.0'));
            %-
            pval_var_0p5_g2 =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'con
d_char_0.5:group_char_H2000''s'));
            pval_var_0p75_g2 =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'con
d_char_0.75:group_char_H2000''s'));
            pval_var_1p0_g2 =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'con
d_char_1.0:group_char_H2000''s'));
            %-
            pval_var_0p5_g3 =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'con
d_char_0.5:group_char_H3000''s'));
            pval_var_0p75_g3 =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'con
d_char_0.75:group_char_H3000''s'));
            pval_var_1p0_g3 =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'con
d_char_1.0:group_char_H3000''s'));

            % tstat_var =
stats_out.Coefficients.tStat(strcmp(stats_out.Coefficients.Properties.RowNames,'cond
_char'));
            % slope_var =
double(stats_out.Coefficients.Estimate(strcmp(stats_out.Coefficients.Properties.RowN
ames,'cond_char')));
            % pval_var =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'gro
up_id'));
            % tstat_var =
stats_out.Coefficients.tStat(strcmp(stats_out.Coefficients.Properties.RowNames,'grou
p_id'));
            % slope_var =
double(stats_out.Coefficients.Estimate(strcmp(stats_out.Coefficients.Properties.RowN
ames,'group_id')));
            % pval_var =
stats_out.Coefficients.pValue(strcmp(stats_out.Coefficients.Properties.RowNames,'gro
up_id'));
            % tstat_var =
stats_out.Coefficients.tStat(strcmp(stats_out.Coefficients.Properties.RowNames,'grou
p_id'));
```

```
            % slope_var =
double(stats_out.Coefficients.Estimate(strcmp(stats_out.Coefficients.Properties.RowN
ames,'group_id')));
            inter_mn =
double(stats_out.Coefficients.Estimate(strcmp(stats_out.Coefficients.Properties.RowN
ames,'(Intercept)')));
        catch e
            fprintf('Error. Variable
%s\n\n%s\n',string(varnames{var_i}),getReport(e))
            R2 = 0;
            pval = 1;
            slope = 0;
            inter = 0;
        end
        STATS_STRUCT = struct('anova',{{}},...
                        'anova_grp',{{}},...
                        'pvals',{{}},...
                        'pvals_pairs',{{}},...
                        'pvals_grp',{{}},...
                        'pvals_grp_pairs',{{}},...
                        'regress_pval',{{}},...
                        'regress_line',{{}},...
                        'r2_coeff',{{}},...
                        'regress_xvals',0);
        STATS_STRUCT.anova_grp = {anova_p_group,anova_p_group,anova_p_group};
        STATS_STRUCT.pvals_grp_pairs = {[1,1],[1,2],[1,3]};
        STATS_STRUCT.pvals_grp = {1,pval_grp2,pval_grp3};
        STATS_STRUCT.anova={anova_p_var,anova_p_inter,anova_p_inter};
        STATS_STRUCT.pvals = {[1,pval_var_0p5,pval_var_0p75,pval_var_1p0],...
            [1,pval_var_0p5_g2,pval_var_0p75_g2,pval_var_1p0_g2],...
            [1,pval_var_0p5_g3,pval_var_0p75_g3,pval_var_1p0_g3]};
        STATS_STRUCT.pvals_pairs = {{[1,1],[1,2],[1,3],[1,4]},...
            {[1,1],[1,2],[1,3],[1,4]},...
            {[1,1],[1,2],[1,3],[1,4]}};
        % STATS_STRUCT.regress_pval={pval_var};
        % STATS_STRUCT.regress_line={[inter_mn,slope_var]};
        % STATS_STRUCT.r2_coeff=R2;
        %
STATS_STRUCT.regress_xvals=[0,unique(double(string(T_vals_plot.cond_char)))',1.25];
        STATS_OUT = [STATS_OUT; STATS_STRUCT];
        % figure;
        VIOLIN_PARAMS = {'width',0.1,...
            'ShowWhiskers',false,'ShowNotches',false,'ShowBox',true,...
            'ShowMedian',true,'Bandwidth',0.15,'QuartileStyle','shadow',...
            'HalfViolin','full','DataStyle','scatter','MarkerSize',8,...
            'EdgeColor',[0.5,0.5,0.5],'ViolinAlpha',{0.2 0.3}};
        PLOT_PARAMS = struct('color_map',color_dark,...

'cond_labels',unique(T_vals_plot.cond_char),'group_labels',unique(T_vals_plot.group_
char),...
```

```
'cond_offsets',[-0.3,-0.1,0.1,0.3],'y_label',varnames_labs{var_i},'group_offsets',
[0.125,0.475,0.812],...
            'title',varnames_labs{var_i},'font_size',10,'ylim',[min(T_vals_plot.
(varnames{var_i}))-std(T_vals_plot.(varnames{var_i})),max(T_vals_plot.
(varnames{var_i}))+3*std(T_vals_plot.(varnames{var_i}))],...

'font_name','Arial','x_label','speed','do_combine_groups',~DO_PLOT_GROUPS);
        % ax = axes();
        fig = figure('color','white','renderer','Painters');
        %
sgtitle(atlas_name,'FontName',PLOT_STRUCT.font_name,'FontSize',14,'FontWeight','bold
','Interpreter','none');
        set(fig,'Units','inches','Position',[0.5,0.5,3,3])
        set(fig,'PaperUnits','inches','PaperSize',[1 1],'PaperPosition',[0 0 1 1])
        hold on;
        set(gca,AXES_DEFAULT_PROPS{:})
        axax = group_violin(T_vals_plot,varnames{var_i},'cond_char','group_char',...
            fig,...
            'VIOLIN_PARAMS',VIOLIN_PARAMS,...
            'PLOT_PARAMS',PLOT_PARAMS,...
            'STATS_STRUCT',STATS_STRUCT);
        % set(axax,'OuterPosition',[0,0,1,1]);
        % set(axax,'Position',
[0.1+horiz_shift,VIOLIN_BOTTOM+vert_shift,AX_W*im_resize,AX_H*im_resize]);  %[left
bottom width height]
        hold off;
        % exportgraphics(fig,[tmp_savedir filesep sprintf('%s_kinematics-speed-
group-interact.tiff',varnames{var_i})],'Resolution',300)
        % close(fig)
        %- iterate
   end
end
```

	SumOfSquares	DF	MeanSquares	F	pValue
cond_char	513.52	3	171.17	5.7679	0.00074339
group_char	4705.5	2	2352.8	79.279	7.1488e-29
cond_char:group_char	34.611	6	5.7685	0.19438	0.97828
Error	9852.7	332	29.677		
Total	15112	343			

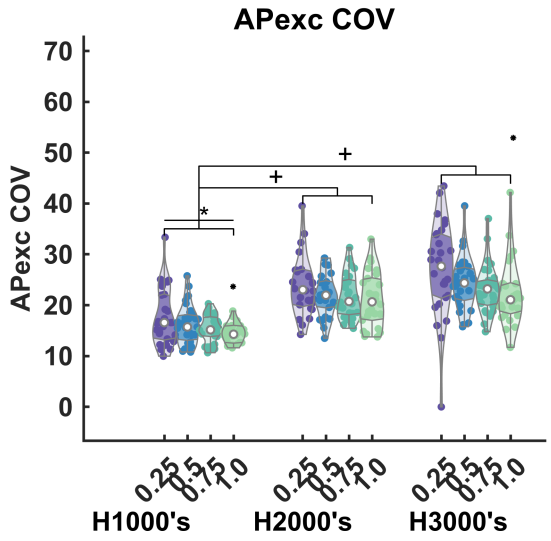
Linear regression model:
    mean_APexc_COV ~ 1 + cond_char*group_char

Estimated Coefficients:

	Estimate	SE	tStat	pValue
(Intercept)	17.6	0.97843	17.988	0
cond_char_0.5	-1.4705	1.3837	-1.0627	0.28869
cond_char_0.75	-2.3011	1.3837	-1.663	0.097263
cond_char_1.0	-2.8362	1.3837	-2.0497	0.041177
group_char_H2000's	6.2097	1.4487	4.2864	2.3826e-05
group_char_H3000's	9.6221	1.4074	6.837	3.8906e-11

cond_char_0.5:group_char_H2000's	-0.41057	2.0488	-0.2004	0.84129
cond_char_0.75:group_char_H2000's	0.15007	2.0488	0.073251	0.94165
cond_char_1.0:group_char_H2000's	0.12962	2.0488	0.063268	0.94959
cond_char_0.5:group_char_H3000's	-1.4163	1.9903	-0.71159	0.47722
cond_char_0.75:group_char_H3000's	-1.6951	1.9903	-0.85167	0.39501
cond_char_1.0:group_char_H3000's	-1.0821	1.9903	-0.54368	0.58702

Number of observations: 344, Error degrees of freedom: 332
Root Mean Squared Error: 5.45
R-squared: 0.348, Adjusted R-Squared: 0.326
F-statistic vs. constant model: 16.1, p-value = 2.66e-25
Condition 0.25 & Group H1000's does not have outliers
Condition 0.5 & Group H1000's does not have outliers
Condition 0.75 & Group H1000's does not have outliers
Condition 0.25 & Group H2000's does not have outliers
Condition 0.5 & Group H2000's does not have outliers
Condition 0.75 & Group H2000's does not have outliers
Condition 1.0 & Group H2000's does not have outliers
Condition 0.25 & Group H3000's does not have outliers
Condition 0.5 & Group H3000's does not have outliers
Condition 0.75 & Group H3000's does not have outliers
lbl =
'*'



	SumOfSquares	DF	MeanSquares	F	pValue
cond_char	0.024363	3	0.0081211	53.014	5.0633e-28
group_char	0.011754	2	0.0058769	38.364	1.0249e-15
cond_char:group_char	0.0028446	6	0.0004741	3.0949	0.005805
Error	0.050858	332	0.00015319		
Total	0.090592	343			

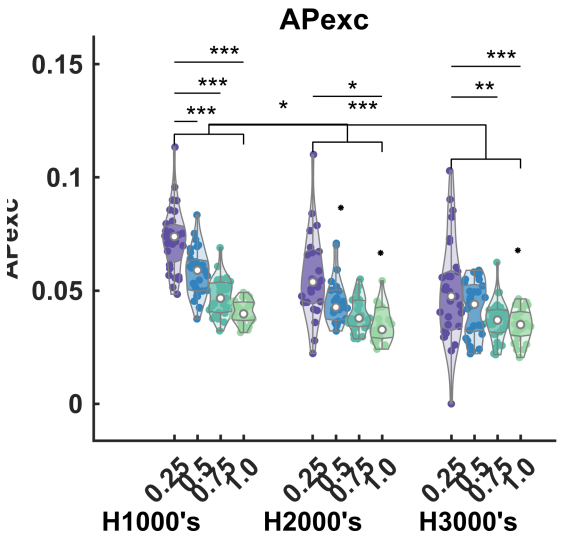
Linear regression model:
    mean_APexc_mean ~ 1 + cond_char*group_char

Estimated Coefficients:

	Estimate	SE	tStat	pValue
(Intercept)	0.07284	0.0022229	32.767	0
cond_char_0.5	-0.015054	0.0031437	-4.7886	2.5346e-06
cond_char_0.75	-0.025652	0.0031437	-8.1598	6.9944e-15
cond_char_1.0	-0.032101	0.0031437	-10.211	0

group_char_H2000's	-0.016513	0.0032914	-5.0169	8.574e-07
group_char_H3000's	-0.02318	0.0031975	-7.2496	2.9564e-12
cond_char_0.5:group_char_H2000's	0.0057604	0.0046547	1.2375	0.21676
cond_char_0.75:group_char_H2000's	0.0089507	0.0046547	1.9229	0.055345
cond_char_1.0:group_char_H2000's	0.011885	0.0046547	2.5534	0.011114
cond_char_0.5:group_char_H3000's	0.0074119	0.0045219	1.6391	0.10214
cond_char_0.75:group_char_H3000's	0.013018	0.0045219	2.8789	0.0042497
cond_char_1.0:group_char_H3000's	0.018227	0.0045219	4.0309	6.8949e-05

Number of observations: 344, Error degrees of freedom: 332
Root Mean Squared Error: 0.0124
R-squared: 0.439, Adjusted R-Squared: 0.42
F-statistic vs. constant model: 23.6, p-value = 1.22e-35
Condition 0.25 & Group H1000's does not have outliers
Condition 0.5 & Group H1000's does not have outliers
Condition 0.75 & Group H1000's does not have outliers
Condition 1.0 & Group H1000's does not have outliers
Condition 0.25 & Group H2000's does not have outliers
Condition 0.75 & Group H2000's does not have outliers
Condition 0.25 & Group H3000's does not have outliers
Condition 0.5 & Group H3000's does not have outliers
Condition 0.75 & Group H3000's does not have outliers
lbl =
'*'



	SumOfSquares	DF	MeanSquares	F	pValue
cond_char	1380.6	3	460.19	21.028	1.7001e-12
group_char	11.041	2	5.5203	0.25224	0.77721
cond_char:group_char	169.28	6	28.213	1.2892	0.26154
Error	7265.9	332	21.885		
Total	8775.4	343			

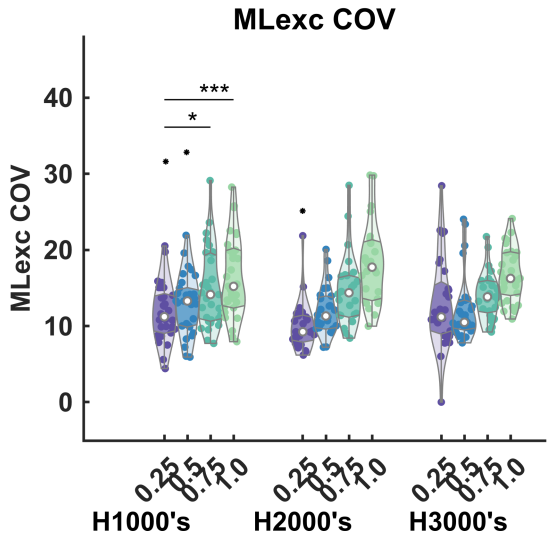
Linear regression model:
    mean_MLexc_COV ~ 1 + cond_char*group_char

Estimated Coefficients:

	Estimate	SE	tStat	pValue
(Intercept)	12.399	0.84022	14.757	0
cond_char_0.5	1.1267	1.1883	0.94822	0.34371
cond_char_0.75	2.4947	1.1883	2.0995	0.036529

cond_char_1.0	4.0434	1.1883	3.4028	0.00074852
group_char_H2000's	-1.7528	1.2441	-1.4089	0.15979
group_char_H3000's	0.52175	1.2086	0.43171	0.66623
cond_char_0.5:group_char_H2000's	0.23995	1.7594	0.13638	0.8916
cond_char_0.75:group_char_H2000's	1.6466	1.7594	0.93588	0.35002
cond_char_1.0:group_char_H2000's	3.53	1.7594	2.0064	0.045627
cond_char_0.5:group_char_H3000's	-1.8156	1.7092	-1.0623	0.28888
cond_char_0.75:group_char_H3000's	-1.4228	1.7092	-0.83246	0.40575
cond_char_1.0:group_char_H3000's	-0.22921	1.7092	-0.13411	0.8934

Number of observations: 344, Error degrees of freedom: 332
Root Mean Squared Error: 4.68
R-squared: 0.172, Adjusted R-Squared: 0.145
F-statistic vs. constant model: 6.27, p-value = 2.06e-09
Condition 0.75 & Group H1000's does not have outliers
Condition 1.0 & Group H1000's does not have outliers
Condition 0.5 & Group H2000's does not have outliers
Condition 0.75 & Group H2000's does not have outliers
Condition 1.0 & Group H2000's does not have outliers
Condition 0.25 & Group H3000's does not have outliers
Condition 0.5 & Group H3000's does not have outliers
Condition 0.75 & Group H3000's does not have outliers
Condition 1.0 & Group H3000's does not have outliers
lbl =
'*'



	SumOfSquares	DF	MeanSquares	F	pValue
cond_char	0.20622	3	0.068738	117.94	5.2429e-52
group_char	0.005367	2	0.0026835	4.6043	0.010657
cond_char:group_char	0.0061783	6	0.0010297	1.7667	0.10521
Error	0.1935	332	0.00058283		
Total	0.40756	343			

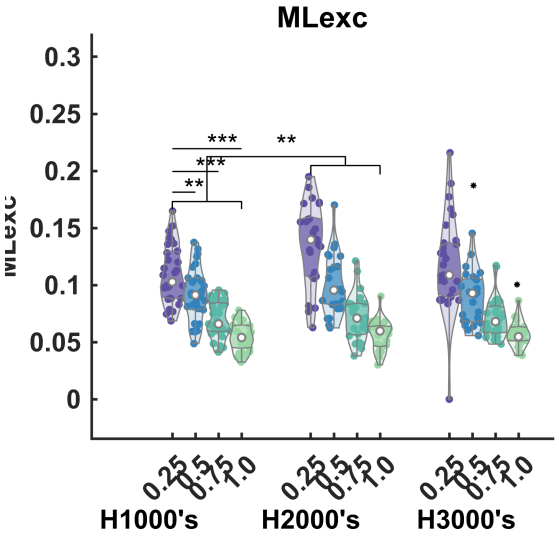
Linear regression model:
    mean_MLexc_mean ~ 1 + cond_char*group_char

Estimated Coefficients:

	Estimate	SE	tStat	pValue
(Intercept)	0.10947	0.004336	25.247	0
cond_char_0.5	-0.017933	0.0061321	-2.9244	0.0036886

cond_char_0.75	-0.039543	0.0061321	-6.4485	3.9857e-10
cond_char_1.0	-0.054845	0.0061321	-8.9439	0
group_char_H2000's	0.0265	0.0064201	4.1277	4.6391e-05
group_char_H3000's	0.0086163	0.0062369	1.3815	0.16805
cond_char_0.5:group_char_H2000's	-0.018145	0.0090794	-1.9985	0.046481
cond_char_0.75:group_char_H2000's	-0.024216	0.0090794	-2.6672	0.0080244
cond_char_1.0:group_char_H2000's	-0.024806	0.0090794	-2.7321	0.006629
cond_char_0.5:group_char_H3000's	-0.0072349	0.0088203	-0.82026	0.41266
cond_char_0.75:group_char_H3000's	-0.007362	0.0088203	-0.83466	0.40451
cond_char_1.0:group_char_H3000's	-0.0048904	0.0088203	-0.55444	0.57965

Number of observations: 344, Error degrees of freedom: 332
Root Mean Squared Error: 0.0241
R-squared: 0.525, Adjusted R-Squared: 0.509
F-statistic vs. constant model: 33.4, p-value = 2.25e-47
Condition 0.25 & Group H1000's does not have outliers
Condition 0.5 & Group H1000's does not have outliers
Condition 0.75 & Group H1000's does not have outliers
Condition 1.0 & Group H1000's does not have outliers
Condition 0.25 & Group H2000's does not have outliers
Condition 0.5 & Group H2000's does not have outliers
Condition 0.75 & Group H2000's does not have outliers
Condition 1.0 & Group H2000's does not have outliers
Condition 0.25 & Group H3000's does not have outliers
Condition 0.75 & Group H3000's does not have outliers



	SumOfSquares	DF	MeanSquares	F	pValue
cond_char	15.027	3	5.0091	425.88	2.0227e-113
group_char	2.9443	2	1.4721	125.16	3.1006e-41
cond_char:group_char	1.6651	6	0.27751	23.594	3.2072e-23
Error	3.9049	332	0.011762		
Total	24.054	343			

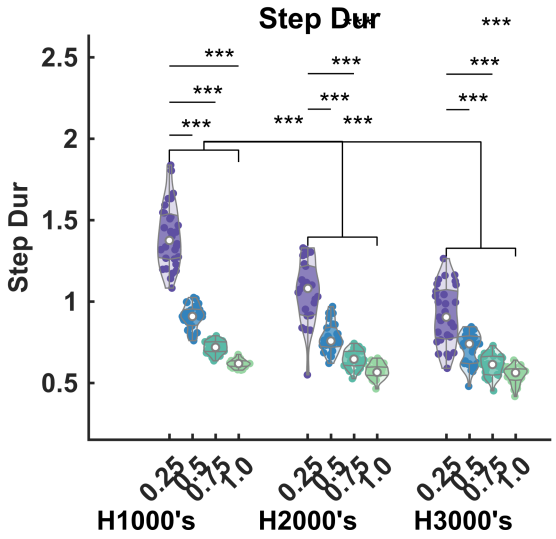
Linear regression model:
    mean_StepDur ~ 1 + cond_char*group_char

Estimated Coefficients:

	Estimate	SE	tStat	pValue
(Intercept)	1.4035	0.019479	72.052	0
cond_char_0.5	-0.4998	0.027547	-18.144	0

cond_char_0.75	-0.68494	0.027547	-24.864	0
cond_char_1.0	-0.78382	0.027547	-28.454	0
group_char_H2000's	-0.34499	0.028841	-11.962	0
group_char_H3000's	-0.48362	0.028018	-17.261	0
cond_char_0.5:group_char_H2000's	0.21742	0.040787	5.3306	1.812e-07
cond_char_0.75:group_char_H2000's	0.27243	0.040787	6.6794	1.0121e-10
cond_char_1.0:group_char_H2000's	0.29732	0.040787	7.2895	2.2913e-12
cond_char_0.5:group_char_H3000's	0.28542	0.039623	7.2034	3.9679e-12
cond_char_0.75:group_char_H3000's	0.37219	0.039623	9.3933	0
cond_char_1.0:group_char_H3000's	0.4113	0.039623	10.38	0

Number of observations: 344, Error degrees of freedom: 332
Root Mean Squared Error: 0.108
R-squared: 0.838, Adjusted R-Squared: 0.832
F-statistic vs. constant model: 156, p-value = 7.76e-124
Condition 0.25 & Group H1000's does not have outliers
Condition 0.5 & Group H1000's does not have outliers
Condition 0.75 & Group H1000's does not have outliers
Condition 1.0 & Group H1000's does not have outliers
Condition 0.25 & Group H2000's does not have outliers
Condition 0.5 & Group H2000's does not have outliers
Condition 0.75 & Group H2000's does not have outliers
Condition 1.0 & Group H2000's does not have outliers
Condition 0.25 & Group H3000's does not have outliers
Condition 0.5 & Group H3000's does not have outliers
Condition 0.75 & Group H3000's does not have outliers
Condition 1.0 & Group H3000's does not have outliers



	SumOfSquares	DF	MeanSquares	F	pValue
cond_char	6740.1	3	2246.7	207.71	7.7455e-76
group_char	130.53	2	65.263	6.0337	0.0026675
cond_char:group_char	88.717	6	14.786	1.367	0.22724
Error	3591	332	10.816		
Total	10524	343			

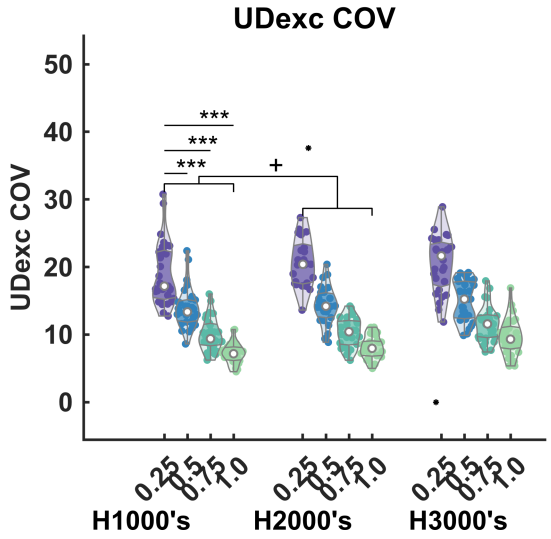
Linear regression model:
    mean_UDexc_COV ~ 1 + cond_char*group_char

Estimated Coefficients:

	Estimate	SE	tStat	pValue

(Intercept)	19.06	0.59069	32.267	0
cond_char_0.5	-5.1528	0.83536	-6.1683	2.006e-09
cond_char_0.75	-9.0823	0.83536	-10.872	0
cond_char_1.0	-11.817	0.83536	-14.146	0
group_char_H2000's	2.2522	0.8746	2.5751	0.010453
group_char_H3000's	0.75527	0.84964	0.88892	0.37469
cond_char_0.5:group_char_H2000's	-1.8481	1.2369	-1.4942	0.13608
cond_char_0.75:group_char_H2000's	-1.9003	1.2369	-1.5364	0.1254
cond_char_1.0:group_char_H2000's	-1.4087	1.2369	-1.1389	0.25557
cond_char_0.5:group_char_H3000's	0.28351	1.2016	0.23595	0.81362
cond_char_0.75:group_char_H3000's	0.82164	1.2016	0.6838	0.49458
cond_char_1.0:group_char_H3000's	1.6617	1.2016	1.3829	0.16761

Number of observations: 344, Error degrees of freedom: 332
Root Mean Squared Error: 3.29
R-squared: 0.659, Adjusted R-Squared: 0.647
F-statistic vs. constant model: 58.3, p-value = 9.5e-71
Condition 0.25 & Group H1000's does not have outliers
Condition 0.5 & Group H1000's does not have outliers
Condition 0.75 & Group H1000's does not have outliers
Condition 1.0 & Group H1000's does not have outliers
Condition 0.5 & Group H2000's does not have outliers
Condition 0.75 & Group H2000's does not have outliers
Condition 1.0 & Group H2000's does not have outliers
Condition 0.5 & Group H3000's does not have outliers
Condition 0.75 & Group H3000's does not have outliers
Condition 1.0 & Group H3000's does not have outliers



	SumOfSquares	DF	MeanSquares	F	pValue
cond_char	0.020795	3	0.0069318	226.47	5.8719e-80
group_char	4.9071e-05	2	2.4535e-05	0.8016	0.44948
cond_char:group_char	7.1571e-05	6	1.1928e-05	0.38972	0.88549
Error	0.010162	332	3.0608e-05		
Total	0.031023	343			

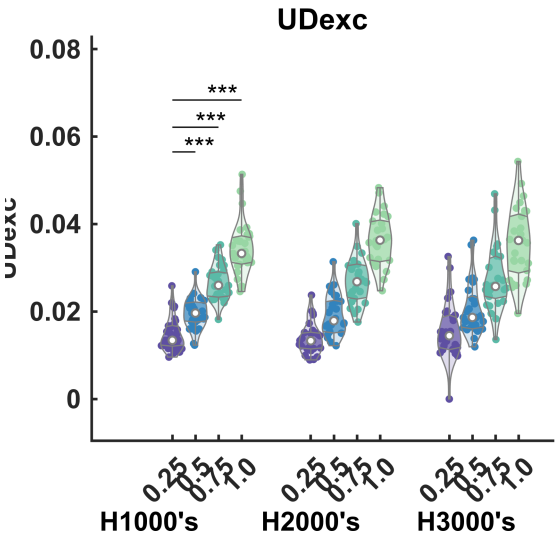
Linear regression model:
    mean_UDexc_mean ~ 1 + cond_char*group_char

Estimated Coefficients:

	Estimate	SE	tStat	pValue

(Intercept)	0.014731	0.00099366	14.825	0
cond_char_0.5	0.0047999	0.0014052	3.4157	0.00071511
cond_char_0.75	0.011826	0.0014052	8.4159	1.2212e-15
cond_char_1.0	0.019711	0.0014052	14.027	0
group_char_H2000's	-0.00078988	0.0014713	-0.53687	0.59171
group_char_H3000's	0.00072046	0.0014293	0.50408	0.61454
cond_char_0.5:group_char_H2000's	0.00057383	0.0020807	0.27579	0.78288
cond_char_0.75:group_char_H2000's	0.00105	0.0020807	0.50467	0.61413
cond_char_1.0:group_char_H2000's	0.0027467	0.0020807	1.3201	0.18771
cond_char_0.5:group_char_H3000's	0.00032226	0.0020213	0.15943	0.87343
cond_char_0.75:group_char_H3000's	4.9064e-05	0.0020213	0.024274	0.98065
cond_char_1.0:group_char_H3000's	0.00032131	0.0020213	0.15896	0.8738

Number of observations: 344, Error degrees of freedom: 332
Root Mean Squared Error: 0.00553
R-squared: 0.672, Adjusted R-Squared: 0.662
F-statistic vs. constant model: 62, p-value = 1.18e-73
Condition 0.25 & Group H1000's does not have outliers
Condition 0.5 & Group H1000's does not have outliers
Condition 0.75 & Group H1000's does not have outliers
Condition 1.0 & Group H1000's does not have outliers
Condition 0.25 & Group H2000's does not have outliers
Condition 0.5 & Group H2000's does not have outliers
Condition 0.75 & Group H2000's does not have outliers
Condition 1.0 & Group H2000's does not have outliers
Condition 0.25 & Group H3000's does not have outliers
Condition 0.5 & Group H3000's does not have outliers
Condition 0.75 & Group H3000's does not have outliers
Condition 1.0 & Group H3000's does not have outliers



	SumOfSquares	DF	MeanSquares	F	pValue
cond_char	43.952	3	14.651	523.68	1.7467e-125
group_char	5.8086	2	2.9043	103.81	9.5755e-36
cond_char:group_char	4.299	6	0.7165	25.611	5.4366e-25
Error	9.2881	332	0.027976		
Total	64.775	343			

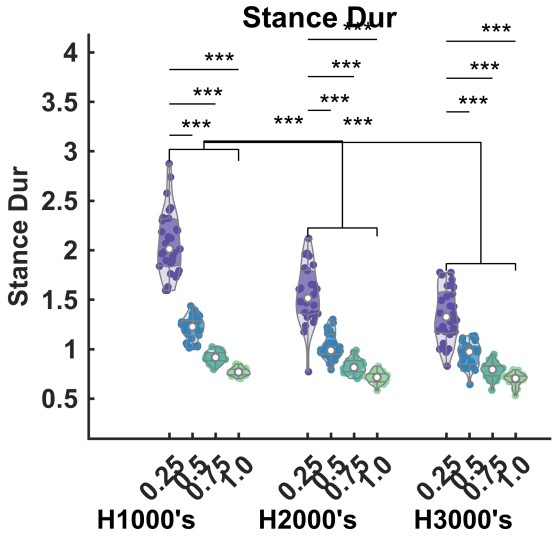
Linear regression model:
    mean_StanceDur ~ 1 + cond_char*group_char

Estimated Coefficients:

	Estimate	SE	tStat	pValue

(Intercept)	2.079	0.030041	69.206	0
cond_char_0.5	-0.86968	0.042484	-20.471	0
cond_char_0.75	-1.1625	0.042484	-27.362	0
cond_char_1.0	-1.3064	0.042484	-30.751	0
group_char_H2000's	-0.5321	0.04448	-11.963	0
group_char_H3000's	-0.73492	0.043211	-17.008	0
cond_char_0.5:group_char_H2000's	0.35358	0.062904	5.621	4.0275e-08
cond_char_0.75:group_char_H2000's	0.44137	0.062904	7.0165	1.2843e-11
cond_char_1.0:group_char_H2000's	0.47539	0.062904	7.5574	4.0412e-13
cond_char_0.5:group_char_H3000's	0.47354	0.061109	7.7492	1.1369e-13
cond_char_0.75:group_char_H3000's	0.60401	0.061109	9.8841	0
cond_char_1.0:group_char_H3000's	0.65395	0.061109	10.701	0

Number of observations: 344, Error degrees of freedom: 332
Root Mean Squared Error: 0.167
R-squared: 0.857, Adjusted R-Squared: 0.852
F-statistic vs. constant model: 180, p-value = 9.66e-133
Condition 0.25 & Group H1000's does not have outliers
Condition 0.5 & Group H1000's does not have outliers
Condition 0.75 & Group H1000's does not have outliers
Condition 1.0 & Group H1000's does not have outliers
Condition 0.25 & Group H2000's does not have outliers
Condition 0.5 & Group H2000's does not have outliers
Condition 0.75 & Group H2000's does not have outliers
Condition 1.0 & Group H2000's does not have outliers
Condition 0.25 & Group H3000's does not have outliers
Condition 0.5 & Group H3000's does not have outliers
Condition 0.75 & Group H3000's does not have outliers
Condition 1.0 & Group H3000's does not have outliers



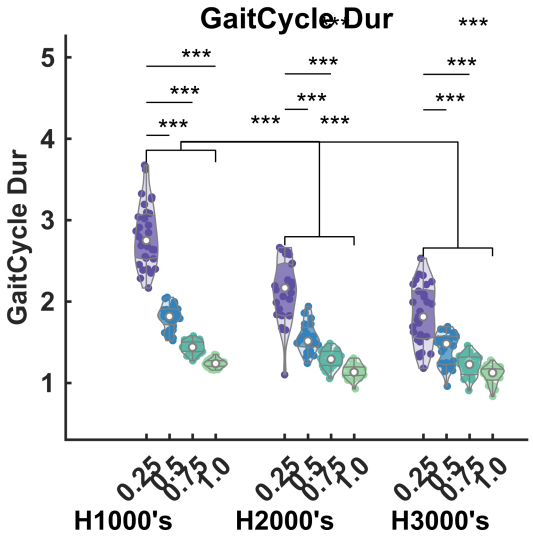
	SumOfSquares	DF	MeanSquares	F	pValue
cond_char	60.37	3	20.123	425.92	1.9947e-113
group_char	11.803	2	5.9013	124.91	3.5903e-41
cond_char:group_char	6.6729	6	1.1121	23.539	3.5894e-23
Error	15.686	332	0.047246		
Total	96.582	343			

Linear regression model:
    mean_GaitCycleDur ~ 1 + cond_char*group_char

Estimated Coefficients:

	Estimate	SE	tStat	pValue
(Intercept)	2.8096	0.039039	71.968	0
cond_char_0.5	-1.0015	0.05521	-18.14	0
cond_char_0.75	-1.3726	0.05521	-24.861	0
cond_char_1.0	-1.5697	0.05521	-28.432	0
group_char_H2000's	-0.68931	0.057804	-11.925	0
group_char_H3000's	-0.96869	0.056154	-17.251	0
cond_char_0.5:group_char_H2000's	0.43405	0.081747	5.3097	2.0148e-07
cond_char_0.75:group_char_H2000's	0.54426	0.081747	6.6579	1.1512e-10
cond_char_1.0:group_char_H2000's	0.5934	0.081747	7.2591	2.7838e-12
cond_char_0.5:group_char_H3000's	0.57171	0.079414	7.1991	4.0761e-12
cond_char_0.75:group_char_H3000's	0.74636	0.079414	9.3984	0
cond_char_1.0:group_char_H3000's	0.82335	0.079414	10.368	0

Number of observations: 344, Error degrees of freedom: 332
Root Mean Squared Error: 0.217
R-squared: 0.838, Adjusted R-Squared: 0.832
F-statistic vs. constant model: 156, p-value = 8.33e-124
Condition 0.25 & Group H1000's does not have outliers
Condition 0.5 & Group H1000's does not have outliers
Condition 0.75 & Group H1000's does not have outliers
Condition 1.0 & Group H1000's does not have outliers
Condition 0.25 & Group H2000's does not have outliers
Condition 0.5 & Group H2000's does not have outliers
Condition 0.75 & Group H2000's does not have outliers
Condition 1.0 & Group H2000's does not have outliers
Condition 0.25 & Group H3000's does not have outliers
Condition 0.5 & Group H3000's does not have outliers
Condition 0.75 & Group H3000's does not have outliers
Condition 1.0 & Group H3000's does not have outliers



	SumOfSquares	DF	MeanSquares	F	pValue
cond_char	3.8535	3	1.2845	473.06	1.7124e-119
group_char	0.047564	2	0.023782	8.7587	0.00019639
cond_char:group_char	0.011678	6	0.0019464	0.71683	0.63628
Error	0.90147	332	0.0027153		
Total	4.8067	343			

Linear regression model:
    mean_PeakUpDownVel_mean ~ 1 + cond_char*group_char

Estimated Coefficients:

	Estimate	SE	tStat	pValue
(Intercept)	0.10503	0.0093589	11.222	0
cond_char_0.5	0.080532	0.013236	6.0845	3.2187e-09
cond_char_0.75	0.16932	0.013236	12.793	0
cond_char_1.0	0.2711	0.013236	20.482	0
group_char_H2000's	0.00981	0.013857	0.70793	0.47948
group_char_H3000's	0.022854	0.013462	1.6977	0.090505
cond_char_0.5:group_char_H2000's	0.0033763	0.019597	0.17229	0.86332
cond_char_0.75:group_char_H2000's	0.0082478	0.019597	0.42087	0.67412
cond_char_1.0:group_char_H2000's	0.034878	0.019597	1.7797	0.076033
cond_char_0.5:group_char_H3000's	0.0033636	0.019038	0.17668	0.85987
cond_char_0.75:group_char_H3000's	0.0030957	0.019038	0.16261	0.87093
cond_char_1.0:group_char_H3000's	0.0082434	0.019038	0.433	0.6653

Number of observations: 344, Error degrees of freedom: 332
Root Mean Squared Error: 0.0521
R-squared: 0.812, Adjusted R-Squared: 0.806
F-statistic vs. constant model: 131, p-value = 1.72e-113
Condition 0.5 & Group H1000's does not have outliers
Condition 0.75 & Group H1000's does not have outliers
Condition 1.0 & Group H1000's does not have outliers
Condition 0.25 & Group H2000's does not have outliers
Condition 0.5 & Group H2000's does not have outliers
Condition 0.75 & Group H2000's does not have outliers
Condition 1.0 & Group H2000's does not have outliers
Condition 0.25 & Group H3000's does not have outliers
Condition 0.5 & Group H3000's does not have outliers
Condition 0.75 & Group H3000's does not have outliers
Condition 1.0 & Group H3000's does not have outliers